THE BEAUTIFUL INDIA
JAMMU AND KASHMIR
BY
SUKHDEV SINGH CHIB



A Ladakhi in Costume

This Beautiful India

JAMMU AND KASHMIR

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To the sacred memory of my maternal uncle Late Subedar Gorakh Singh Manhas who displayed the qualities of philanthropy, magnanimity, large heartedness and active co-operation at a time when our uprooted family stood aghast and bewildered.

PREFACE

The state of Jammu and Kashmir is strategically located not only for India but its almost central location in the heart of Asian Continent makes it strategically important for the entire continent. Since time immemorial this panoramic land has constantly been visited by hikers, trekkers, mountaineers and adventurist travellers. Known as Asian Switzerland the world over, Kashmir has been casting the spell bounded charm on internal and foreign tourists alike. A peaceful paradise for a long time, it suddenly assumed a strategic significance during Second World War. And the division of India in 1947 abruptly brought this land to limelight. Kashmir became a geo-political problem and it remained a burning problem in the United Nations till India refused to consider it a problem and categorically made it known to the world as a whole that Kashmir is an integral part of the Indian Union and no nation had any right to question this truth. Naturally there should be no dearth of literature on a region which remained a controversial issue for a considerable time. The present title does not claim any originality in this regard.

The author who originally hails from Pakistan held Kashmir (Watala in Tehsil Bhimbhar of Mirpur district) witnessed the holocaust caused by the communal frenzy and armed intrusion of Pakistan supported tribals in Jammu and Kashmir during the second half of the year 1947 at a tender age of nine. The horrible memories of fire, arson, loot, plunder, hunger, endless and tiring bare footed journey for days together in winter and shelterless stay during winter rains are quite vivid to him till this day. But it is quite sad that inspite of the passage of three decades no government, State or Central have done anything for the amelioration of those unfortunate displaced persons who after leaving their hearths and homes crossed over to Punjab and elsewhere for better security. These things have constantly been agitating the mind of the author though the author thinks himself Indian first and Indian last. While thinking of the alarming and fearful instances seen during childhood, author thought of bringing out a title dealing with those atrocities along with economy, people and cultural heritage of his native state.

My father Late Subedar Sadhu Singh Chib had to undergo untold hardships and miseries to bring up and educate his four children. He approached every possible quarter with a sanguine

hope that he would be atleast compensated for the land, cattle, property, home and hearth left back but no agency came to his rescue. In those days he used to get a paltry sum of Rs. 75 as his monthly pension. But hats of to his old colleague Late Subedar Gorakh Singh Manhas who besides giving shelter in his house in Kangra valley also helped him in initiating some economic pursuit. But for his generosity our family might have vanished long back. No doubt my father had to do many odd jobs to make both ends meet yet as a true soldier he never shirked work and upheld the dignity of labour. He passed away in September 1976 and prior to that he has been persuading me to write a book on Jammu and Kashmir, the land he loved most. A couple of months before the sad and unfortunate hour I had initiated work on this volume and it is quite satisfying for me that my father had known before his death that I had started the work on the title proposed by him. His close associate, our patron and our maternal uncle (he adopted my mother as his sister about five decades ago at Poona cantonment as he belonged to the same *gotra* as my mother) also left for his heavenly abode exactly four months after the sad demise of my father. Therefore, I have completed the title and dedicated the same to the noble soul, parallel of which is quite rare these days.

My wife Mrs. Shashi Kanta Chib who respected, loved and cherished the large heartedness, magnanimity and illustrious nature of my father pressed me to take up this volume on priority basis after the sad and sudden demise of my father. Bouquet of thanks to her for getting this work accomplished in a record time. My tiny tots Pankaj and Ritu also deserve thanks as during this busy time I have ignored and evaded many of their genuine demands and requests. Principal B.L. Kapur my benefactor who has always looked upon me as his son deserves no less gratitude for inspiring me for my writings. Last but not the least, I own all the mistakes and follies that might have crept into this title because of a hurried attempt. The follies if pointed out by learned readers would be thankfully mended in next edition.

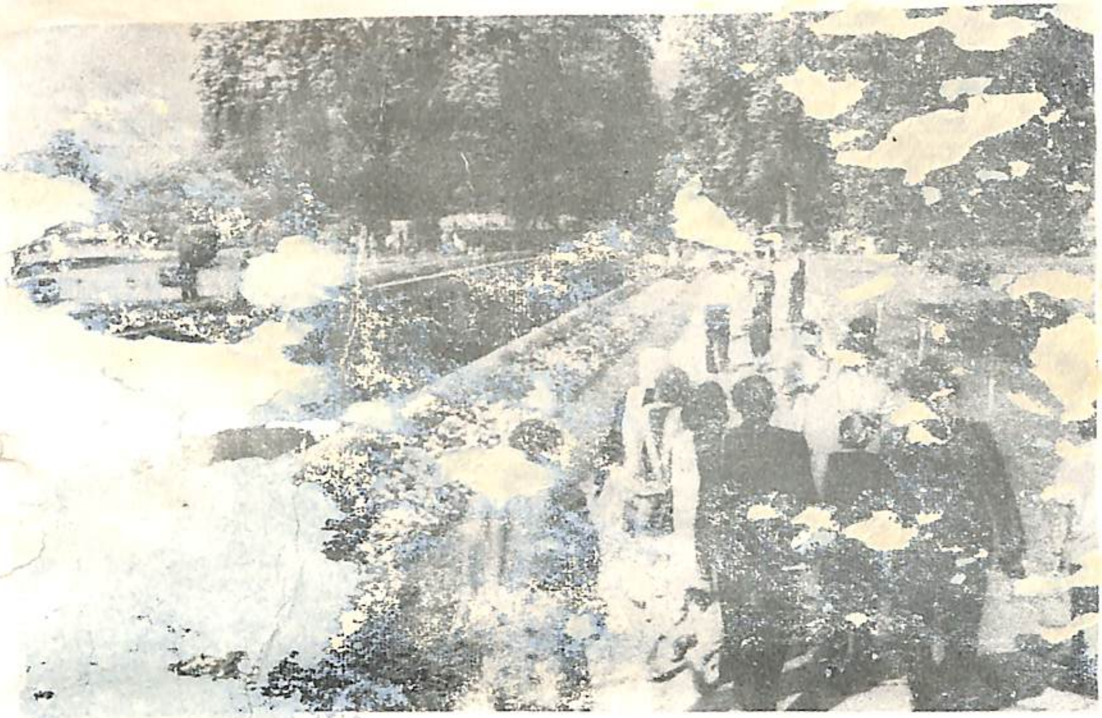
December 1977 Sukhdev Singh Chib

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But the gradual arrival of Hun kings revived the traditional Brahminism and Buddhism started giving way. By the time Chinese pilgrim Huan Tsang visited Kashmir, he found the mass of the people Hindus, and the Buddhist monasteries few and partly deserted. The Hun King Mirikakula is best remembered in the pages of history for his cruelty. He got many Buddhists slaughtered and monasteries destroyed. "Of him there are told many stories of his cruelties. The people have passed down through the ages one of these relating to the Pir Panjal Pass in the south-west of the valley where there is a ridge over which he crossed the mountain with his army. In those days armies used elephants extensively; one of these fell down into ravine below and so amused was the king by its cries of agony that he ordered that another hundred be forced over the precipice."[2] Tortured by his oppression many Buddhist monks sought shelter in Tibet.

After Mirikakula people witnessed peace and prosperity in the reign of Vinayaditya. He was a saint statesman who gave up the luxurious life and lived in a hut at the foot of Shankaracharya hill. Two godowns were also constructed there. He asked the landlords of Kashmir to pour, of their own free will, one tenth of their farm produce. He himself cultivated a piece of land to earn his livelihood and contributed one tenth of his farm produce to the godowns. Each morning he distributed the foodgrains to needy people. After him are mentioned the names of Pratapaditya and his sons Jalauk and Tunjin. Pratapaditya and his sons kept people happy and prosperous. They also got many temples erected. But in Tunjin's time a terrible and devastating famine broke out which took a very heavy toll of human lives. Meghvahan was another ruler after Tunjin who gave impetus to Buddhism. After him a dispute of succession arose between his grandsons Hiranya and Toraman. Toraman died in due course and his wife Anjana quietly left for an unknown destination with her male child Pravarsen. Hiranya had no heir and after his death on the invitation of local populace King Vikramaditya of Ujjain appointed Matrigupta as the ruler of Kashmir. After the death of Vikramaditya, Matrigupta chose ascetic life. Meanwhile Pravarsen had come of age and availed the golden opportunity. He occupied the throne and founded the present city of Srinagar which was then known as Pravarsen nagar.

Rajatarangani makes a mention of Kar Kot dynasty and Lalitaditya was an illustrious ruler of this dynasty. He not only annexed Punjab and Kanauj but many parts of Central

2 *Ibid*, p. 36.

Asia also. In his time the State progressed and people saw plenty and prosperity. He got many temples and Buddhist monasteries constructed. The famous Martand temple is his creation. He loved art and literature. He invited many scholars and artists to his court. He also got channels constructed for irrigating farm land. "But he had another side to his nature; when intoxicated he would issue the cruelest orders and did not always keep faith or his word. In a fit of drunken madness he ordered that the beautiful city Pravarsen had built should be 'set on fire' and just as the history tells us that Nero fiddled whilst Rome burnt, so Lalitaditya stood and rocked with crazy laughter as he watched the city of Shrinagar go up in flames."[3] To house his government he later on got the city of Paraspur (*Parihaspur*) built at the present site of Shadipur. His reign was followed by short periods of weak rulers.

Sukhvarman was the last ruler of Kar Kot dynasty. He was slaughtered and consequently many parts of the region became independent. His son Avantivarman became the founder of Utpal dynasty. He is said to have founded the town of Avantipur now popularly known as Vantipore. "It was during his rule that the ablest and the most famous engineer of Kashmir, Suyya, flourished. He was responsible for draining the waters of the Jhelum, in the neighbourhood of Sopore, originally called Suyyapur after his name."[4] Yaskardev was a capable ruler in this dynasty. He gave a relief to the population by way of administering justice and developing trade, otherwise, it was an age of weak rulers, struggles, conspiracies and intrigues. Many 'boy kings' ruled during this period and mostly faced death at the hands of ambitious ministers. Queen Didda is said to have worked as regent to her son. She is said to have successfully foiled the evil designs of Mahmud Ghazni whose cupid eyes were attracted towards the riches of this valley too. After the death of her husband Kshemgupta she ruthlessly and wickedly virtually ruled over Kashmir. She got remarried to her paramour who had risen from a peasant herdsman to the position of Court carrier and appointed him as her minister. Her nephew Sangram raj followed her to murder her minister husband and son. "Following this there seems to be masses of short reigns, sons being killed off by mothers, murders and suicides, until King Harsa came to the throne in 1089, ruling for twelve years. He was outstanding among the latter Hindu kings of Kashmir, being brave, able and versatile, a lover of the arts and of music, but cruelty and kind heartedness, cunning and want of thought, displayed themselves in turn in his

3 *Ibid*, p. 39.
4 Kumudi, *Kashmir—Its Cultural Heritage*, (1952), Bombay, p. 11.

chequered life."[5]

Then followed the Lohara dynasty. Many areas and tracts had started asserting independence. The monarchy had been reduced to mere shadow. Might became an order of the day while sword became the sole arbiter of power. For more than one century Kashmir groaned under misrule, chaos, anarchy, loot and plunder. Thereafter came the rule of Singh Deo. He had three notable personalities in his court viz., Shah Mir, the grandson of Swat Saint Fur Shah, Rainchen the fugitive Tibetan prince and Lankar Chak the ruler of Dardistan. Singh Deo gave shelter to all these homeless fugitives and offered them services in his court, but they gave the unkindest cut to their host. In the year A.D. 1322 Turks invaded Kashmir under the ferocious leader Zulkadar Khan. Finding himself unable to defend the aggressors the King and his General Ram Chand fled to Kishtwar. The Tartar invader plundered the valley, set the town of Srinagar on fire, slaughtered a large number of people and took away a large number of people as slaves. All these persons alongwith Tartar leader and his troops perished in a severe snow storm while going out of Kashmir. Ram Chand came back to Kashmir but was murdered by Rainchen the fugitive Tibetan prince. Rainchen got married to Kuta Rani the daughter of Ram Chand and proclaimed himself as ruler of Kashmir. He wished to embrace Hinduism but Brahmins refused to accept him in the fold of their faith. He instead embraced Islam and let loose terror on non muslims as a Muslim ruler under the new name of Sadar-ud-Din. He destroyed many Hindu temples, burnt and destroyed manuscripts and killed a large number of Hindus. However, he got erected the Jama Masjid of Srinagar. After having ruled for about two years and a half he died and thence Udyana Deva, the brother of late king Singha Deo arrived and occupied the throne. He married the widow of Rainchen and ruled over Kashmir for fourteen years. On his death Kuta Rani assumed the reins of kingdom but was soon overthrown by Shah Mir, who himself became the ruler and laid the foundations of Muslim rule in Kashmir. He assumed the title of Shams-ud-Din and proposed marriage to Kuta Rani, already twice widowed. After evading his proposal for some time she found herself powerless and agreed to get married to him. But when the king entered the bridal chamber she stabbed herself to death with a bejewelled golden dagger rather than submitting to his lust.

5 Gervis, Pearce, *op. cit.*, p. 43-44.

Muslim Period

Though Sadar-ud-Din can be named as a first Muslim ruler of India but he was a convert from a Buddhist and that too at the pain of refusal of Brahmins to allow him to embrace Hindu religion. It was Shah Mir or Shams-ud-Din with whom a long chain of Muslim rulers started in the mid twelfth century and continued till 1532 when Mughals occupied the Kashmir Territory. In fact Islam stepped in Kashmir when its synthesis with Hindu thought had already begun in the form of Bhakti and Sufi movements in other parts of the country.

Among these Muslim rulers the name of Sultan Sikandar popularly known as *But Shikan* i.e. iconoclast is remembered till this day for his misdeeds and atrocities. A sadistic religious fanatic But Shikan, it seems, had taken a vow of wreaking vengeance over Hinduism by obliterating this faith with a long history. He ordered the mass destruction of Hindu places of worship, books on Hindu learning and anything sacred to Hindus. The material so got by razing Hindu temples was used in the construction of mosques. A special squad was created for this purpose. But when the impatient king found that many years would be required to completely destroy the countless Hindu temples he simply order to set the temples on fire and disfigure magnificent buildings built by Hindus. "Having glutted his vengeance on Hindu temples, Sikandar turned his attention to the people who had worshipped in them, and he offered them three choices, death, conversion or exile. Many fled, many were converted and many were killed, and it is said that this thorough monarch burnt seven maunds of sacred threads of the murdered Brahmins. All books of Hindu learning which he could lay his hands on were sunk in the Dal lake, and Sikandar flattered himself that he had extirpated Hinduism from the valley."[6] In this gloomy reign the Hindus were persecuted to this an extent that only eleven Hindu families survived in the valley. The *Malma* Hindus today are known as the descendants of those eleven families whereas the *Banama* Hindus are the descenadnts of outsiders who poured into the valley at a later stage and especially from Deccan. This religious bigot, fool headed fanatic, iconoclast, enemy of knowledge and persecutor was succeeded by the self controlled, frugal and virtuous ruler in the person of Zain-ul-Ab-ul-Din. In many respects a contrast to his father Sikandar, Zain-ul-Ab-ul-Din worked zealously for the greater benefit of greater people. He

6 Lawrence, R.W., *The Valley of Kashmir*, (1895-Indian Reprint, 1967), Srinagar, p. 191.

remitted the poll tax i.e., *Jeziya* on Hindus, inspired them to learn Persian and patronised the Sanskrit learning. "Hindu temples were rebuilt, Brahmins called back to Kashmir, Hindu learning revived, canal and bridges built, cultivators helped, taxes reduced and fine arts patronised."[7] He built many inns and caravan serais along the trading routes. He also introduced the vocations like carpet weaving, paper making, silk breeding, horticulture, papier mache, stone cutting, stone polishing, window cutting, bottle making, gold heating, shawl weaving etc. etc. "Zain-ul-Ab-ul-Din turned Kashmir into a smiling garden of industry inculcating in the hearts of the people some conceptions of labour and life and also implanting in their minds the gems of real progress."[8] During his long and peaceful reign he stamped out corruption, crushed the crime ruthlessly, introduced a system of proper registration to check fraudulent transactions in property and started educational and charitable institutions. For such of his benevolent and social welfare activities he earned the title of *Badshah* i.e. Great Monarch or King of kings. It is often said that a man inherits many traits from his mother and father. But it is quite strange that Zain-ul-Ab-ul-Din was a total constrast to his father who was cruel, bigot, fanatic and oppressor. There can be two reasons for this reversal only. Either the public might have revolted against the oppressive rule of his father and the son might have learnt lesson from history. But history and chronicles stand witness that in spite of his ruthless and cruel rule none dared to raise voice against Sultan Sikandar the *But Shikan*. The other alternative can be that Zain-ul-Ab-ul-Din might have had a narrow escape in his life because of some Hindu's large heartedness, mercy or benevolence. It is gathered from contemporary history that King Zain-ul-Ab-ul-Din suffered from a very painful boil in the initial years of his rule. No royal physician could cure the king of this suffering and the king's condition started deteriorating. The entire body of the ruler started getting infected and king grew weaker and weaker. On the other hand stung by the atrocities of king's father no Hindu physician could dare to offer his services fearing the fate he might have to face if something happened to the king. Though reduced to slenderest minority the large hearted Hindus could not bear the pangs of king's suffering. Ultimately Shri Bhatta a renowned Hindu physician came to king's rescue. It is said that he cured the king of that painful boil by way of golden ointment. The king having recovered paid rich

7 Gupta, Sisir, *Kashmir--A Study in India-Pakistan relations*, (1966), Bombay, p. 19.
8 Pandit, Anamal Koul, *Jammu and Kashmir State*, p. 37.

tributes to Shri Bhatt in his court and offered him to ask for any royal favour. To king's utter surprise Shri Bhatt did not ask for any personal favour but instead appealed that already persecuted Hindus be permitted to live a peaceful life in an honourable and dignified way. Being pleased by this answer the king from that day started rather showing more consideration towards Hindus than Muslims. Apart from this the king appointed his saviour Shri Bhatt as Minister and Chief Justice. This further helped in the rehabilitation of Hindus. Many Hindus who had fled in *But Shikan's* time staged a come back to their native place and many newly converts came back to the fold of their faith. This way the merciful and benevolent king earned the name of *Badshah* from his Hindu subjects. This great ruler was quite simple and pious in habits. For his personal needs he drew upon the sale proceeds of a copper mine he had himself discovered. Though peace loving he couldn't resist the temptation of expanding the frontiers of his Kingdom. He added Tibet and a part of Punjab to his territory. During this endearingly called Badshah's rule Kashmir made big strides in the field of arts, crafts, learning, poetry and architecture. Unfortunately this great ruler was succeeded by his drunkard and weak son. Mirza Haider invaded his territory in 1532 and held some parts for some time. Thereafter the Chaks attacked from the north. Chaks had troubled Zain-ul-Ab-ul-Din also but he had successfully repulsed them. "Little is known of these people, except that they were not of Kashmir blood and the only traces now to be found of them are in the northern parts of the State."[9] Eight Chak leaders are said to have ruled Kashmir. These brave but unscrupulous people gradually reduced the country to utter poverty by way of their brutally cruel ways. Chaks are said to be *Shia* Muslims who let loose a terror on *Sunni* Muslims and Hindus. Tired of their cruel methods, the latter communities sent their tales of woe to Akbar the Mughal King at Delhi and requested him to come to their rescue. Akbar invaded Kashmir but faced a stubborn resistance at the hands of Yaqub Khan the last Chak ruler. But Akbar succeeded in subjugating the Chaks and this way the reins of Kashmir passed on to Mughal Emperor from Sultans of Kashmir.

Mughal Period

In the Mughal period the Kashmir was ruled by Governors appointed by Mughal Emperors distantly located at Delhi. Akbar visited Kashmir thrice and during his last visit he got constructed the

9 Gervis, Pearce, *op. cit*. p. 52.

fort on the Hari Parbat Hill to attract the people who had fled the valley because of the tortures of Chaks. To attract such people he also offered very liberal wages to those who worked on the fort. His Revenue Minister Todar Mal surveyed the tract and laid down a sound revenue system for Kashmir. But it was Jahangir who bestowed lavished care on this valley. He spared no efforts to beautify this region. He has come down to history as a great garden builder. He got about 777 gardens laid out in the valley.The roses and bed musk of these gardens yielded a revenue of about one hundred thousand rupees annually. Shalimar Bagh, Nishat Bagh and Naseem Bagh are three magnificent specimens of Jahangir's intense love for gardens, many of which were destroyed later by Pathan rulers. He also introduced the Chinar plantations throughout the valley which till date add to the charm of Kashmir. It is interesting to find that Jahangir also got married to a Kashmiri belle. Jahangir was so fond of Kashmir that while on his death bed on being asked for anything he asked for "only Kashmir". Shahjahan continued this tradition and got designed many pleasure places. One of his Kashmir Governors, Ali Mardan got built a series of inns on the Pir Panjal route. Aurangzeb once visited Kashmir during his illness alongwith his French physician Bernier. Aurangzeb is notoriously known for his oppressive and brutal atrocities on Kashmiri Brahmins but in spite of all this Bernier has left a very attractive account of this peaceful paradise on earth. Bernier pays tributes to the wit, ingenuity and intelligence of Kashmiri Hindus and declares that "in poetry and sciences they are not inferior to the Persians." In view of the fruits, flowers and crops grown in abundance he has called the Kashmir valley as "the terrestrial paradise of the Indies".

After Aurangzeb the Mughal Empire in India hastened towards decay. The Governors in Kashmir started assuming more or less independent postures. Slowly and gradually the Kashmir province became independent of Delhi control. In A.D. 1753 Kashmir passed on to another spell of terror and oppression. The Pathans gained control over Kashmir under the leadership of Ahmad Shah.

Pathan Period

By mid 18th century Kashmir fell prey to another curse. Pathans proved to be the most brutal and cruel masters the valley had ever seen. "It was said of them that they thought no more of cutting off heads than of plucking a flower."[10] Under the terrible period of

10 Younghusband, Francis, *Kashmir*, (1933), London, p. 141.

persecution and fanaticism of infernal Pathan despots the Brahmins and Shia Muslims faced atrocities of the worst order. Asad Khan who boasted that Nadir Shah was his prototype not only presecuted his subjects but killed one of his wives on a petty pretence and drove out his mother after accusing her of infidelity. He had discovered novel but nasty ways of persecuting the Brahmins. He used to get grass sacks prepared by his victims, then tie two of them back to back in the sack and got them thrown into the Dal Lake. "As an amusement, a pitcher filled with odoure would be placed on a Brahmin's head and Muslims would pelt the pitcher with stones till it broke, the unfortunate victim being blinded with filth."[11] Brahmins were forbidden to use shoes and turbans and were ordered to grow beards. The *Jezia* was reimposed. Many Brahmins were exiled, killed and converted to Islam. His successor Madad Khan outheroed him. One more Pathan ruler Mir Hazar used leather bags instead of grass sacks for indiscriminately drowning the Brahmins and Shia Muslims. Atta Mohammad Khan was a ferocious libertine and his agent in the person of an ugly woman Koshib seemed to have pledged not to leave any virgin girls for marriage to Hindus. To save their daughters from molestation the Hindu mothers used to get their daughters' heads clean-shaven and also sliced their noses to disfigure them. Only one ruler Amir Khan Jawan Sher can be said to be comparatively better among the Pathan rulers. He got constructed Amiran Kadal Bridge and original Shergarhi Palace used since then by all rulers except last one as the Royal Palace .Yet on hearing the admiration of gardens laid down by Mughals he got destroyed as many gardens as he could. Pandit Zairam Bhan and Pandit Nath Ram Tikoo were no doubt favoured in the Afghan court for their literacy and intellectual merit yet they were not permitted to wear turbans, shoes or have red tilak at their foreheads. By the early years of 19th century Maharaja Ranjit Singh had risen as a mighty power in Punjab plains. The Hindus and Shia Muslims of Kashmir looked forward to Ranjit Singh to come to their rescue. Through the good offices of Pandit Birbal Dhar, a diplomatic courtier, and his son—Raj Kaka, Maharaja Ranjit Singh was apprised of the conditions then prevailing in Kashmir valley. He was also urged upon to invade Kashmir. Muhammad Azim the Pathan ruler came to know about these secret activities. He called for the wives of Pandit Birbal Dhar and his son Raj Kak. Birbal's wife committed suicide but Raj Kak's wife was taken unawares. She was taken to the court where she was forcefully converted to Islam and sent to Kabul. Writing about this

11 Sharma, B.L., *op.cit.*, p. 33.

incident, Lawrence in 1895 disclosed "where she was living until quite recently". Maharaja sent his forces via Pir Panjal in 1814 and himself remained at Poonch to watch the operation. This expedition failed. But again in 1819 Maharaja sent his armed forces under the able leadership of his trusted general Misri Diwan Chand and Dogra Chief Gulab Singh of Jammu. The last Afghan ruler Mohammad Azim fled to Kabul and left behind his brother Jabbar Khan as Governor of Kashmir, who could not put up resistance. The Sikhs overpowered the Afghan forces, entered Shupiyon and later on hoisted Sikh flag on the topmost point of Hari Parbat fort. This way the Afghan rule came to its end in the Kashmir Valley.

Sikh Period

Sikh rule has been similar to the Mughal rule. Governors for Kashmir were appointed from Lahore. It was impossible for the ruler himself to supervise and control the valley from such a distance in those days of scanty rather non-existent means of transport and cummunications. Ten governors were sent in turn during the Sikh period to govern Kashmir. The governors in turn governed according to their own whims and wishes. "The poor wretched people were taxed even more heavily, and having been converted from Hinduism to Mohammedanism they were again persecuted as such, the Sikhs being an off shoot of Hindus."[12] Heavy taxes were levied on agriculture, handicrafts, etc. About three quarter of the agricultural produce was collected as land revenue. Shawls were taxed at about 26% of their value, besides taxing the wool, a basic raw material for shawl weaving. "Every trade and profession was taxed from butchers to scavengers and public notaries to prostitutes, whilst the Kotwal—the Chief Justice—had to pay thirty thousand rupees a year for his appointment, being left to reimburse himself as best as he could—one can imagine how. In addition to this the dreaded 'begar' system of unpaid forced labour, which was nothing less than slave hunting, was reintroduced into the country, the State armed forces rounding up all the able bodied men and sending them away for long periods to distant places to labour as coolies—Often never to return. . . . Again, thousands fled the country: this time they were the Muslims."[13] Moorcraft in his book while describing Kashmir of that time speaks of naked people and half deserted villages. Focussing his attention on prevailing poverty and starvation he wrote, "Sikhs look upon the Kashmirians as little better

12 Gervis, Pearce, *op cit.*, p. 57.
13 *Ibid*, p. 57-58.

than cattle."

The things became even worse after the death of Maharaja Ranjit Singh. In the time of Sher Singh—a supposed son of Ranjit Singh—the situation deteriorated beyond expectation in the wake of a terrible famine and consequent spread of Cholera. Thousands left Kashmir valley for Punjab plains. It was only Colonel Mian Singh (A.D. 1833) the Sikh Governor who gave relief to the valley dwellers and is still remembered by Kashmiris with affection and love. But he was slaughtered by the revolting army which had probably revolted against the strict control of the governor on the whims and wishes of army then prevailing in Kashmir. Dhyan Singh the brother of Dogra Chief Gulab Singh and Sikh Minister was also put to death by a Sikh Chieftain.

After Sher Singh's assassination Dalip Singh a child of five was put on the throne but the real power vested in the hands of his mother and Lal Singh, her alleged Brahmin, paramour. To keep their forces busy so that the forces might not revolt against them they set the forces against Jammu and British territory. The Sikh armies crossed the frontiers and attacked British garrisons. This escalated the confrontation. British defeated the Sikh army on February 10, 1846 at Sabraon and this decisive battle sealed the then Sikh fate in India. In such circumstances the Sikhs sought the help of Maharaja Gulab Singh to bring about a settlement with British. Gulab Singh negotiated with the British. As a result of these negotiations two treaties emerged at Lahore and Amritsar on 9th and 16 March, 1846 respectively. These treaties contained the following provisions:

1. "By the 4th article of the treaty of Lahore, dated March 9, 1846 the Maharaja of Lahore ceded to the East India Company in perpetual sovereignty, as equivalent for one crore of rupees, all his forts, territories, rights, and interests in the hill countries which are situated between the rivers Beas and Indus, including the province of Kashmir and Hazara.
2. By the first article of the treaty of Amritsar dated March 16, 1846 the British Government transferred and made over for ever, in independent possession to Maharaja Gulab Singh, and the heirs male of his body all the hilly or mountainous country, with its dependencies, situated to the eastward of river Indus and westward of river Ravi, including Chamba and excluding Lahoul, being part of the territories ceded to the British Government by the Lahore State, according to the provision of article IV of the treaty of Lahore, dated the 9th March, 1846 . . . .

3. The limits of the territories of Maharaja Gulab Singh shall not be any time changed without the concurrence of the British Government."[14]

This way the state of Kashmir passed into Dogra hands.

Dogra Period

Before occupying Kashmir Maharaja Ranjit Singh had already occupied Jammu. In the 18th century Jammu was ruled by a Dogra ruler named Ranjit Dev. In his time the territory of Jammu extended to Ravi in the east and Chenab in the west. Many hill chieftains existed in the hilly principalities of Jammu at that time. After Ranjit Dev's death, the hill chieftains waged a war of succession. Maharaja Ranjit Singh availed this opportunity and took possession of Jammu. Gulab Singh and his two brothers Suchet Singh and Dhyan Singh were serving in the Sikh army. These handsome, robust and brave Dogra brothers caught the eye of Maharaja Ranjit Singh. Gulab Singh by dint of his illustrious career distinguished himself as one of the ablest and trusted lieutenants of Maharaja Ranjit Singh. Gulab Singh the soldier of fortune, was created Raja of Jammu by Maharaja Ranjit Singh in A.D. 1820 for his valuable services rendered in capturing the ruler of Rajouri, who had been fighting against the Sikhs. Suchet Singh was made the Raja of Ram nagar whereas Dhyan Singh was elevated as Minister in the Sikh court as well as Raja of Poonch. These brothers hailed from the dynasty of Ranjit Dev. All the three brothers annexed the adjoining territories. Gulab Singh was capable most and bravest of all. His other two brothers were slaughtered by their enemies and thus their territories also came under Raja Gulab Singh. He was not only a dauntless soldier but a justice loving and a far sighted administrator also. He was so prompt in administering justice that aggrieved parties could approach him directly. Very often he used to go in disguise to know about the grievances of his subjects and punished the culprits severely. He was such a good horse rider that on being summoned he used to reach Lahore within one night on horse back. His vigilant eye on chieftains, grip over state revenue and strict disciplineful administration were the secrets of his success. Raja Gulab Singh had a very able general in the person of Zorawar Singh. With the help of Zorawar Singh, Raja succeeded in annexing Ladakh and Baltistan. Zorawar Singh invaded Tibet also but unable to bear the severe winter perished alongwith all his infantry.

14 *Gazetteer of Kashmir and Ladakh*, (1934 Reprint), Delhi.

In the Anglo Sikh wars Gulab Singh acted as a mediator and also got Kashmir for a tribute of Rs. 7·5 lakh. "Thus Kashmir, after five generations of Musalman rule, passed again into the hands of the Hindus. It must have been an intense relief to all classes in Kashmir to see the downfall of the evil rule of the Pathans, and to none was the relief greater than to the peasants, who had been cruelly fleeced by the rapacious sirdars of Kabul."[15]

Gulab Singh as a wise and strong ruler tried to consolidate peace in the otherwise deplorable conditions prevailing then at Jammu. But he had to constantly quell and suppress disturbances at the frontiers. Hunza ruler attacked Gilgit, defeated Dogra forces and captured the Gilgit fort along with Darel, Yasin and Purial. Maharaja then sent two forces one from Astor and other from Baltistan and succeeded in recapturing Gilgit fort. But in 1852 Gauhar Rahman of Yasin routed the Dogra forces and occupied Dardistan, the territory located on the right bank of Indus. Gilgit was also lost to the Dogra Chief and for eight years Indus became the frontier of Kashmir. Maharaja Gulab Singh expired of dropsy in A.D. 1857 and his death was succeeded by an earthquake in Kashmir.

Maharaja Gulab Singh was succeeded by his third son Ranbir Singh. He tried to give a stabilized administration to the state of Jammu and Kashmir. To re-establish the lost reputation of his father he gave priority in dealing with the frontier rebels. In A.D. 1860 he sent his forces under an able general Dev Singh across Indus and re-occupied Gilgit. Within another three years Yasin was also subdued. In 1865 even the Darel valley was captured. But essentially Maharaja Ranbir Singh was a man of peace devoutedly attached to religion and revival of Sanskrit. Tolerant to all castes and creeds he allowed a free propagation of all religions. The establishment of a grand library consisting of old Sanskrit and Persian manuscripts speaks volumes about Maharaja's interest in learning. To meet the need of linking Kashmir with the rest of then India he got constructed the Jhelum road. In spite of all these virtues Raja Ranbir Singh did not possess a foresight and determination of his father. Towards the concluding years of his reign the Shia and Sunni sects of Muslims clashed and this outbreak took many lives. To pacify the Shias the gravely hurt sect, King had to pay them a sum of rupees three lakhs. A severe famine also ravaged the tract resulting in about 3/4th population's starvation death in city areas and also sizable chunk of rural population faced death. The famine affected the state's economy to this limit that trade came to

15 Lawrence, W.R., *op. cit.*, p. 198-99.

a standstill. It was beyond the means of the king who otherwise had been doing his best to improve upon agriculture. He spent huge amounts on new staples, sericulture, hops, vines and presses. He, however, built a cart road in the valley for importing food in case of such a disaster. Realising the strategic location of this State the British Government insisted on the Raja to allow a British Resident in the State. Maharaja resisted this move and probably died of the tension caused by this persistent and repeated demand, on September 12, 1885. It was during Maharaja Ranbir Singh's time that British Government amended the original agreement to the effect that Kashmir ruler might adopt a successor from the collateral branches of his own family in event of being no male heirs of his body.

Maharaja Ranbir Singh was followed by his eldest son Partap Singh. Though a peace loving ruler, Partap Singh lacked the strong will of his father and he fell prey to the British move, his father has been resisting. British Government succeeded in thrusting a British Resident on the Maharaja. Sir Oliver St. John was first to join this coveted post but was soon replaced by Plowden. Maharaja could not tolerate the exacting methods and interference of Plowden and this led to strained relations between the Ruler and Resident. "He (Plowden) constantly manoeuvred against the Maharaja and was cunning enough to pave the way for a proposal to place his younger brother Amar Singh on the throne. The Maharaja, who was accused of mal-administration and indulgence in corrupt practices, was threatened and coerced into signing a deed of voluntary abdication."[16] But the agitation against this unwanted interference in many parts of the country caused abandonment of this move for good. The British in a way achieved their goal of intervention in the states. They also fortified the Gilgit fort and garrisoned British troops there. A severe earthquake rocked Kashmir during Maharaja Partap Singh's time and caused a heavy loss of life and property. Maharaja who had taken welfare steps of starting educational institutions, introduction of electricity, improving means of transportation and communications was reduced to be a mere figure head mostly through the ill designs of Plowden. Maharaja Partap Singh expired in A.D. 1925 after ruling the state for about four decades.

Maharaja Partap Singh had no son, hence he was succeeded by his nephew Hari Singh, son of Shri Amar Singh who himself had died in 1909. Raja Hari Singh had already worked as a Senior member of the State Council during the reign of his predecessor and had exhibited a considerable aptitude for administration. Hence on becoming the ruler he initiated schemes aiming at public welfare. He

16 Kaumudi, *op. cit.*, p. 24.

showed keen interest in starting schools, dispensaries etc. He also took some steps for the uplift of rural masses. But in his times the political consciousness had dawned on the entire length and breadth of the sub-continent. The State of Jammu and Kashmir could not be an exception in the direction. With the exception of Dogras, all other communities were discontented in the autocratic rule of the Raja. The Muslims started a Reading Room Party for the attainment of political objectives. The party in fact had been started by those young zealots whose imagination was fired by the freedom struggle in then British India. But they had no control over the masses and a Muslim mob attacked Hindu houses and shops on July 13, 1931 which resulted in the death of three Hindus and injuries to many. Hindus also retaliated. Somehow or the other the situation was brought under control. At this juncture Sheikh Mohammad Abdullah, a junior school teacher in Srinagar, holding post-graduate degree in Science came in the limelight. He wished the Muslims to rise from their slumber and make them aware of their rights and responsibilities. With his efforts the Reading Room Party emerged as 'All Jammu and Kashmir Muslim Conference' in 1932. But "the progressive leadership in the Conference took some time to realize that in a land with a multi-religious and multi-linguistic society, a communal party would not be a success, for it could never reflect the problems and dreams of the masses who were not concerned with jobs for the few Muslims acting as top leaders."[17] Sheikh Abdullah worked on the lines of turning his party into a secular party embracing members from all faiths and shades. His efforts bore fruit and on June 28, 1938 the party was renamed as 'All Jammu and Kashmir National Conference'. The Muslim league leader Mohammad Ali Jinnah wanted the communal party to continue but all his persuasions were resisted by Sheikh Abdullah. Sheikh and Jinnah did not see eye to eye on this issue. The Muslim League Leadership tried its best to rouse communal feelings and it did have some impact in the State. On the other hand 'Praja Sabha', a legislative assembly had already been established in 1934 and in the year 1939 majority of its members were elected representatives. In the meanwhile Ghulam Abbas broke away from National Conference and revived Muslim Conference. The Muslim Conference had its manifesto similar to that of the Muslim League. The National Conference in such circumstances had to take bold decisions in the light of fast moving political development in British India. The National Conference challenged the validity of Amritsar treaty and called upon the autocratic ruler to 'Quit Kashmir'. Jinnah sharply reacted to this move and alleged that National

17 Sharma, B.L., *op. cit.*, p. 69.

Conference was coercing the Kashmir Muslims to join its ranks. The movement in the state of Jammu and Kashmir was similar in character and objects to the movement started by the subjects of many princely states of India. The co-sufferers also constituted an 'All India State's Peoples Conference'. Sheikh Abdullah became its President in the year 1946. On May 20, 1946 he was sent behind bars by the State Government for launching Quit Kashmir movement. Abdullah's arrest brought immediate and sharp reactions in Indian National Congress. Nehru was greatly agitated on this issue and decided to enter Kashmir inspite the ban put on his entry by the State Government. On the other hand Sheikh Abdullah was tried and sent to three years imprisonment. The National Conference was put under a legal ban and it continued to be banned till India's Independence day. But to the misfortune of freedom fighters the Muslim Conference and Muslim League supported the acts of Maharaja. "The Maharaja had been challenged by the dynamic, secular and progressive movement initiated by Sheikh Abdullah, and that Sheikh Abdullah's movement had received unqualified support from Congress. On the other hand Maharaja appeared to have received an assurance from the Muslim Conference, and the League, that they were opposed to the ideology of Sheikh Abdullah and would be content to continue the *status quo* without a substantial change. It is in the light of this background that the subsequent events in Kashmir must be considered."[18]

On August 15, 1947 India was partitioned. Two new dominions of 'Secular India' and 'Islamic State of Pakistan' were created on the sub-continent of India. With the passing of Indian Independence Act the suzerainty of British King over the Indian States lapsed. With the lapse of British paramouncy the State of Jammu and Kashmir like all other Indian States was freed. The act provided the rulers of these states to remain independent or join any of the dominions at their will. While almost all the erstwhile states opted to join either India or Pakistan some states preferred to sit on the fence and mark time. Jammu and Kashmir was one of these states. Pakistan on the other hand had ill designs towards this strategically located state. Mr. Jinnah wanted the state of Jammu and Kashmir to cast its lot with Pakistan. For this purpose Pakistan started rousing the communal feelings in the state through its radio. Finding that the National Conference held the thread in its hands, Pakistan thought of other underhand means. On October 22, 1947 the Pakistan government mechanised a tribal invasion over Kashmir.

18 Gajendragadkar, P. B., *Kashmir-Retrospect and Prospect*, (Bombay), 1967, p. 28.

The tribals were aided materially and physically by the regular Pakistani forces. Prior to that the Pakistan government closed Rawalpindi-Srinagar road to traffic. This closure resutled in an economic blockade. Sheikh Abdullah had been released on September 29, 1947 and he had categorically criticised Pakistani moves and intentions. The invaders, who came in the grab of servants of Islam and saviours of Kashmiri Muslims let loose a reign of terror in Kashmir. They looted the houses of their Muslim brothers, killed many of their co-religionists and dishonoured Muslim women. Hundreds of villages and mostly the Muslim villages were devastated. The so-called lovers of Islam dishonoured even the Koran and desecrated the places of their worship by turning mosques into brothels to satisfy their animal lust with abducted women. After lot of killing, looting, abduction and arson in places like Muzaffarabad, Mirpur, Kotli and Rajouri the invading brutes reached Baramulla. In Baramulla about ten thousand people and mostly Muslims lost their lives, defending their soil under the leadership of Maqbool Sherwani. 'Long live Hindu-Muslim Unity' was the slogan repeated by Sherwani while being butchered to death. In the district of Mir Pur Chaunk the Chib Rajputs of Deva-Watala tract gave a very tough resistance to the tribal invaders. But these brave men with weapons like spears, blades, swords, sticks and few gun powder rifles could not stand long in the way of marching tribal hordes laced with three nought three rifles, machine guns, other modern war equipment and above all the ever replenishing aid of regular army. Ultimately after sacrificing few thousand brave men of their clan, the Chibs evacuated their children, womenfolk and aged ones to safer places east of Munawar Tawi. Many youngmen in groups attacked the marching army led by tribal hordes on following two to three days but they got no help in men and arms from the Maharaja who had a skeleton army. It is surprising but true that the frontier on Bhimbhar side had no patrol posts even. No doubt this region was overwhelmingly inhabited by Chib Rajputs who excelled in war but in want of arm and munition they were helpless. Earlier to this massive attack in October 1947, Chibs had repelled about half a dozen raids in July, August and September along the border. The parleys to arm these people with modern arms were still continuing when these brave people were taken unaware and they finally lost their hearths and homes.

When raiders reached Baramulla the very doorsteps of Srinagar, Maharaja Hari Singh retreated to his winter capital, Jammu. At this time finding the situation out of control the Maharaja realised the lapse on his part. He signed the instrument of accession to India and asked the Government of India to send him immediate help to

save his state. The accession was signed on October 26, 1947 and advance party of the Indian forces landed at Srinagar airport on the dawn of next morning. On October 30, 1947 Sheikh Mohammad Abdullah was appointed Head of the Emergency Administration. The Indian forces busied themselves in repelling the intruders who had by that time fortified many of their positions. On March 5, 1948 Maharaja by a proclamation appointed Sheikh Abdullah as his Prime Minister. The Government of India presented its complaint to the Security Council of the United Nations on January 1, 1948. On July 1, 1949 exactly after one year and seven months both the governments ordered a cease-fire. On June 20, 1949 Maharaja Hari Singh appointed his 18-year old son Yuvraj Karan Singh as his Regent and authorised him to carry on all functions of the state, legislative, judicial and executive during his temporary absence. In the latter part of 1951 Sheikh Abdullah pressed Maharaja Hari Singh to abdicate in favour of Yuvraj Karan Singh. Maharaja ceded to the demand and was succeeded by Yuvraj Karan Singh. Meanwhile the constituent assembly was convened on October 31, 1951 and the assembly unanimously elected the Yuvraj as *Sadar-i-Riyasat*, the first head of the state, a position to which any Kashmiri national could be elected for a period of four years. Thus the princely rule of Dogra dynasty came to an end.

Kashmir in the United Nations

In the year 1945 when mankind stood bewildered and aghast on the "investments and achievements" of Second World War many peace loving and forward looking statesmen pinning faith in man's quest for peace, plenty, progress and prosperity helped in the establishment of the United Nations in order "to save succeeding generations from the scourage of war, which twice in our lifetime has brought untold sorrow to mankind, and to reaffirm faith in fundamental human rights of men and women and of nations large and small, and to establish conditions under which justice and respect for obligations arising from treaties and other sources of international law can be maintained and to promote social progress and better standards of life in larger freedom".[19] Pandit Jawahar Lal Nehru, our First Prime Minister, an apostle of peace, having faith in the doctrine of non-violence and negotiations preferred to refer the Pakistani aggression to UNO rather than fighting it out in the battle field. He had already received a severe shock by the holocaust and untold miseries caused to millions of his sub-continental

19 Charter of the U.N.O., San Francisco, 1945.

brethren in the wake of partition riots. He did not want to continue the tale of killing, loot, plunder, arson, rape and abduction any more. He was of the opinion that given time the tempers would cool on both sides and in the meantime the august body UNO would impartially decide the case. He had a staunch faith in human nature and referred the case to the United Nations much against the wishes of many of his colleagues, advisers and well wishers. The Indian complaint consisted of the following facts:

(i) The invaders were allowed transit across Pakistan territory ;
(ii) They were permitted to use Pakistan territory as a base for their operations ;
(iii) The invaders included Pakistani nationals ;
(iv) They derived much of their military equipment, food and supplies (including petrol) and transport from Pakistan; and
(v) The Pakistani officers of armed forces were training, guiding and otherwise actively helping the invaders.

On the basis of these facts the Government of India requested the Security Council to ask the Government of Pakistan:

"(1) To prevent Pakistan Government personnel, military and civil, from participating or assisting in the invasion of the Jammu and Kashmir state ;
(2) To call upon other Pakistan nationals to desist from taking any part in the fighting in the Jammu and Kashmir State ; and
(3) To deny to the invaders (a) access to and use of its territory for operations against Kashmir, (b) military and other supplies, (c) all other kinds of aid that might tend to prolong the present struggle."

It may be recalled here that Government of India approached the Security Council with a sincere hope that "through the prompt action of Security Council peace may be restored." Pakistan Government on the other hand alleged, that "the security, freedom, well being, religion, culture and language of the Muslims of India are in serious danger; that India obtained the accession of the State of Jammu and Kashmir by fraud and violence and that large-scale massacre, looting and atrocities on the Muslims of Jammu and Kashmir State have been perpetrated by the armed forces of the Maharaja of Jammu and Kashmir and the Indian Union and by the non-Muslim subjects of the Maharaja and of the Indian Union."

On the basis of counter charge against India, Pakistan raised a hue and cry for plebiscite in Jammu and Kashmir. But Pakistan forgot the legal aspect of the question that while accepting the request for accession, Lord Mountbatten desired that, "the question of accession should be decided in accordance with the wishes of the people of the State, it is my Government's wish that as soon as law and order have been restored in Kashmir and her soil cleared of the invader the question of the State's accession should be settled by a reference to the people." If one reads these lines carefully than one comes to the conclusion that Pakistan has been evading its own obligations of clearing the soil of Kashmir and unnecessarily pressurising India to fulfil a condition that was never committed by India. Lord Mountbatten "referred to the necessity to ascertain the wishes of the people, and it did not necessarily postulate plebiscite, properly and technically so-called."[20] Even prior to the partition of India when Lord Mountbatten persuaded Maharaja Hari Singh for four days in July 1947 at Srinagar to decide for accession to either dominion, he advised him to 'ascertain the will of people by any means'. He repeated the same thing in his communication to the Maharaja while accepting his request for accession. How can one imagine that conditions for a proper plebiscite existed in the then state at that time having most difficult terrain, remote inhabited areas, inaccessible tracts especially when riots in the adjoining parts of India, Pakistan and some parts of the state itself had started. Moreover numerous ignorant, innocent and illiterate nationals of areas like Gilgit, Ladakh, Baltistan, Tribal tract did not know what plebiscite is and how did it affect them. Hence the only way of ascertaining people's will was to know the will of the majority party and its leaders. Mehr Chand Mahajan was the Prime Minister of the State in October 1947 and he visited Delhi with Maharaja's request. He narrates that Nehru, then Prime Minister of India did not attach much importance to Maharaja's request of accession. During his talks with Nehru and Patel when talks proved to be inconclusive, "just then, a piece of paper was passed over to the Prime Minister. He read it and in a loud voice said, 'Sheikh Sahib also says the same thing'. . . . This came as a timely help for the success of my mission to New Delhi. The Prime Minister's attitude changed on reading the slip."[21] It is clear that Pandit Nehru decided to accept accession and send military help to Kashmir only when he found that Maharaja's request was supported by Sheikh Mohammad Abdullah, the then unquestioned leader of Kashmiris.

20 Gajendragadkar, P.B., *op. cit*, p. 111.

21 Mahajan, Mehr Chand, *Looking Back*, (Bombay), 1963, p. 152.

Hence this factor cannot be ignored while considering the Kashmir issue. Sheikh Abdullah addressing an *Id* gathering on June 24, 1952 said, "Our relationship with India is not a product of sentiment. We have contracted this relationship after giving it ample thought and deliberation. We have taken this step because our ideal and our path is common and one."

The Kashmir Constituent Assembly drafted and approved a constitution for Kashmir. In accordance with this constitution elections are held from time to time and democratic governments have been administering the state with the help of elected Legislatures. In the words of P.B. Gajendragadkar, a former Chief Justice of India, "it is legitimate to suggest that the election of the Constituent Assembly, followed by subsequent constitutional events already mentioned, can well be regarded as the ascertainment of the wishes of the people on the issue of accession. Of course, Pakistan suggests that the elections were rigged ; but that is an allegation which can be conveniently made by Pakistan when these elections constitute a fact extremely inconvenient to the presentation of Pakistan's case."[22]

All said and done, by this time it has been proved that Pakistani forces actively supported and helped the tribal raids in Jammu and Kashmir. So much so that regular Pakistani troops entered Kashmir and fought on the battle front. The United Nations Commission for India and Pakistan (UNCIP) learnt about the presence of Pakistani troops on July 7, 1948. Sisir Gupta refers to the interview between Korbel, one of the Commissioners and Sir Zafrulla Khan, the then Foreign Minister of Pakistan. Zafrulla Khan, admitted on July 7, 1948 that "three brigades of the regular Pakistani troops were in Kashmir since May; they were moved as an act of self defence to protect canal waters and also in view of larger considerations of Pakistan's security. Politically and militarily it was necessary for Pakistan to reinforce the defence line held by the Azad forces."[23] The Commission beside other things observed, that, 'regular Pakistani troops were within the frontiers of the State of Jammu and Kashmir participating in the fighting. On the other hand after accepting the accession of Maharaja, India had every right to send its regular troops to the State and India made this fact known to the world. Auchinleck the then Supreme Commander of Indian and Pakistani forces explained to Jinnah that, 'in so far as Kashmir had acceded to India, the Government of India had every right to send in troops in response to the Maharaja's re-

22 Gajendragadkar, P.B., *op. cit.*, p. 100.
23 Gupta, Sisir, *op. cit.*, p. 175.

quest."[24] On Lord Mountbatten's intervention to avoid the massacre then disfiguring the pages of Indian history, Jinnah suggested that both sides should withdraw simultaneously. On Lord Mountbatten's query that how could tribesmen be asked to retreat, Jinnah said, "If you do this I will call the whole thing off."[25] This shows that tribals were provoked and assisted by Pakistan to raid Kashmir and Pakistan had a hold over them and could recall them. The economic blockade caused by closing Rawalpindi-Srinagar road, Pakistan much earlier exhibited its intention of forcing the Maharaja to accede to Pakistan.

Conclusively, India is not bound to conduct a plebiscite as in many parts of the world where although public opinion is overwhelmingly opposed to the rulers the demand for a plebiscite is turned down. Great Britain does not entertain such an idea with respect to Northern Ireland. Pakistan itself did not accede to such a move in the then East Pakistan now Bangladesh although through general elections the will of people had been made clear. Pakistan would never agree to such a proposal in its North West Frontier Province. In the case of Junagarh which is not even contiguous to Pakistan, she was prepared to ignore the wishes of its people. And now how about Union of South Africa. Not to speak of ascertaining peoples will, many western countries do not want to even censure the ruling white government for its reign of terror let loose on the natives. "Besides, if the promise made by India is regarded as an international commitment, India is perfectly entitled to rely on the principle of *robus sic stantibus* in avoiding the performance of the promise. This doctrine, which is somewhat akin to the doctrine of frustration in the law of contract, provides that a State is exonerated from its obligation under an international undertaking if there is a vital change in the circumstances existing at the time the obligation was undertaken."[26] It is really strange and astonishing to ask India to hold a plebiscite when many constitutional developments have taken place in the State and when Pakistan did not discharge its immediate obligation of clearing the soil of Jammu and Kashmir.

Modern Period

Immediately after the accession of Jammu and Kashmir to India the Government of India took upon its shoulders the responsibility of effecting economic development and maintaining law and

24 Gajendragadkar, P.B., *op. cit.*, p. 76.
25 Campbell - Johnson, A., *Mission with Mountbatten*, (London), 1951, p. 229.
26 Gajendragadkar, P.B., *op. cit.*, p. 116.

order. The first popular ministry in the State was headed by Sheikh Mohammad Abdullah who had to go in 1953 because of political exigencies. Dr. Karan Singh was elected as first head of the State i.e., *Sadar-i-Riyasat*. Bakhshi Gulam Mohammad was the next Prime Minister of Kashmir. During his period our northern neighbour People's China launched an unprovoked aggression on our northern frontier. The Ladakh region of Kashmir became an active theatre of war activities. The memories of a heroic resistance put up by our forces under the able stewardship of Late General Bikram Singh are still afresh. That great son of the Indian soil moved from bunker to bunker to replenish his fighting soldiers with munition, food and moral courage, unlike many commanders who simply sit at the rear headquarters and wait for the pouring in news. On this front the Chinese were literally made to chew the iron grams. In the wake of this attack and general criticism of the then Government, Nehru and his party colleagues like Kamraj Nadar thought of doing a spade work at the grass root politics so as to weed out inefficiency, lethargy and corruption. A plan was outlined under which many public men offered to step down from their offices and pledged to work as social servants among the masses. This plan came to be popularly known as Kamraj Plan after the initiator of the scheme Nadar Kamraj, the then Chief Minister of Tamil Nadu. Bakhshi Gulam Mohammad also stepped down from his office. He was followed by his cabinet colleague Shams-ud-Din, who unfortunately proved to be weak and ineffective for the prevailing political atmosphere in the State. After a couple of months Ghulam Mohammad Sadiq a staunch protagonist of Hindu-Muslim unity, a freedom fighter and an able leader replaced Shams-ud-Din. His period witnessed a lot of development in the state. Credit goes to him for initiating a plan to link the state on the railway map of India.

While India was busy in ameliorating the condition of Kashmiris through developmental schemes, Pakistan had been busy in subversive activities. There is a glaring disparity in the economic development on both sides of the cease-fire line in Kashmir. This gave rise to sporadic and time to time emergence of unrest among the people living on the other side of the cease-fire line. To divert the attention of agitating masses, which otherwise Pakistan could not control, she initiated an anti-India programme. The radio Pakistan started devoting maximum time on such programmes. Finally Pakistan started sneaking intruders into Indian territory with a purpose of creating turmoil and blowing out strategic installations with a misgiving that the Kashmiri Muslim populace would join hands with them in the name of *Jihad*. On the evening

of August 4, 1965 a young Gujjar, Mohammad Din, "was grazing his cattle in a meadow at Darakasi, above Gulmarg, east of the Uri-Poonch bulge, when he was accosted by two raiders dressed in green Salwar-Kameez uniforms and carrying arms. They took him into their camp in a nearby wood where their leader solicited his assistance as a guide and informant. He was offered 400 rupees and asked to report back as soon as he had obtained the desired information about the location of grain stores and transport depots."[27] Mohammad Din on the other hand reported the matter to police. At Galuthi near Mandher similar incident was reported by one Wazir Mohammad to the authorities. This is clear that Muslims living in Kashmir think themselves Indians first and Muslims afterwards. Moreover they do not want to stigmatise the sacred name of their those brethren who heroically laid down their lives in 1947 to defend their motherland. Pakistan in a few days launched a full-fledged attack on a large scale on our Kashmir front. The entire nation rose as one man to face the aggressive designs of Pakistan. India continued to defend its borders and also pressurised Pakistan through neutral nations to put a check on its aggressive activities. But all sane talk proved to be futile and ultimately on September 1, 1965 India crossed the international border and started fighting battle on Pakistani soil. The Pakistan defence was shattered in a couple of weeks even though at that time Pakistan had much more sophisticated, modern and superior weapons. A cease-fire was brought into force on the midnight of September 23, 1965. Later on a peace agreement was signed on January 10, 1966 at Tashkent by our Prime Minister Lal Bahadur Shastri and Pakistan President Late Mohammad Ayub Khan. This shows that Pakistan had not left the idea of forcefully occupying Kashmir though their such malicious designs had been rejected many times by Kashmiris. Though Tashkent agreement was signed and implemented but this implementation lacked letter and spirit, on the side of Pakistan. In the general elections of 1970 the ruling party in Pakistan lost very miserably in its eastern wing. To capture the power in an undemocratic way in that wing the Pakistani President General Yahya Khan with the concurrence of Zulfikar Ali Bhutto let loose a reign of terror. Lakhs of innocent Bengali Muslims were slaughtered, women raped and about a million fled to India. The Bengalis organised themselves in a militia called *Mukti Bahini* and started fighting out guerrilla warfare at many stations. The Pakistan Government wished to force war on India

27 Bamzai, P.N.K., *Kashmir and Politics - From Lake Success to Tashkent*, (Delhi), 1966, p. 275.

too. Prior to that Pakistani hijackers hijacked one Indian plane to Lahore. The passengers were kept almost under internment and Indian plane burnt in spite of appeals pouring in from many parts of the world. India immediately reacted by stopping Pakistani flights over the Indian skies. Ultimately finding itself frustrated and confused the Pakistani forces attacked India at many fronts including one at Kashmir. Again Pakistan wanted to usurp Kashmir. But this time Pakistan had to face a much more crushing defeat. When these warlike activities were still on the Kashmir Prime Minister Ghulam Mohammad Sadiq died of a protracted illness.

Ghulam Mohammad Sadiq was followed by another illustrious and peace loving Chief Minister in the person of Mir Qasim. Mir Qasim who had been in Kashmir politics for a long time knew the pulse of the State. He mediated between the former Prime Minister Mrs. Indira Gandhi and Sheikh Mohammad Abdullah with a view to bring the latter in the forefront and benefitting from his guidance and experience. He was of the opinion that a person of the stature of Sheikh Mohammad Abdullah who spent years in jail for Kashmir, who wanted the princes' rule to go and who helped in the accession of Kashmir to India had been misguided by some of his party colleagues for their own ulterior motives. Now he had become wiser and he understands that the accession of Kashmir is final and irrevocable and the welfare of Kashmiris lies only in sustained developmental activities in line with rest of the Indian States. Mir Qasim stepped down in his favour and Sheikh Mohammad Abdullah became the new Chief Minister of Jammu and Kashmir. Now the State is buzzing with economic development and all the fissiperous tendencies and divisive forces have been curbed. The winter capital of the State, Jammu has already come on the railway map while plans are afoot to extend the railway line to possible limits. New roads and link roads are being constructed. Schemes have been ushered to step up the agricultural production. Horticulture is on the advance. Besides encouraging handicrafts many new industries have been started. A net of infrastructure in the form of hospitals, schools, colleges, research centres etc., is being spread. Today, if the persons who migrated to Pakistan in 1947, had to come back they would not be able to recognise their old place now giving a changed look. They would envy at the much improved lot of their brethren who did not opt then to go to Pakistan and would also curse the hour when they took the unwisest decision under a fit of rage and communalism to migrate to Pakistan. Not only this if the people living on both sides of the cease-fire line were to compare their lots, certainly those living on the other side would heave a sigh and and would also curse the day they decided to help tribal

invaders in 1947.

After the recent Parliamentary elections in India, when Congress lost the power it had held for three decades, withdrew its support to Sheikh Abdullah government. Sheikh Abdullah advised the Governor to dissolve the state assembly and hold fresh elections. This step was criticised by the Congress and its supporters but the Governor Shri L.K. Jha accepted the out-going Chief Minister's Constitutional recommendations. The elections to the state assembly were held in early July 1977. Three major parties i.e. National Conference, Congress and Janta party were in the field. The pre-election scenes were not altogether peaceful and happy. Lot of heat and political activity mounted in the state. Sheikh Abdullah during his election campaign also got a severe heart attack but his party continued the unabated election campaign. As it always happens the candidates belonging to different parties started making different promises and allegations. To counter the allegations levelled against his party Sheikh even threatened to revive the demand of accession. The election results were startling for all. The Janta party which had swept the polls in all other northern states could secure only eleven seats while the Congress with ten seats trailed still behind. The National Conference got the overwhelming majority. However, the Jammu tract has been captured by the Janta and Congress.

Sheikh Mohammad Abdullah has unanimously been chosen the Chief Minister. Keeping in view his shattered health, he has created the post of Deputy Chief Minister for the first time and appointed his closest lieutenant Mirza Afzal Beg as his Deputy. Mirza Afzal Beg after consultation with the Central leadership has unequivocally declared that the accession of Kashmir to Indian Union is final and irrevocable. It is a very healthy signs. On the other hand the Janta Government has pledged to safeguard the special privileges of Kashmiris granted to them under the Constitution. It is hoped that under such an amicable atmosphere the state as well as Central leadership would spare no efforts to develop this strategically located state. 'The Paradise on earth' in the eyes of poets would, however, become so when every tear from every eye is wiped out. For this a multipronged attack on want, hunger, ignorance and poverty has to be launched.

CHAPTER
2

Physical Environment

The mountainous state of Jammu and Kashmir, almost centrally located on the continent of Asia in the neighbourhood of Pamir, *The Roof of the World* is popularly termed as 'Jewel decked Crown of India'. Being centrally situated on the map of Asia, Jammu and Kashmir is of strategic significance not only for India but for all other neighbouring nations. The state has enjoyed this position since time immemorial when trade and caravan routes linking Central Asia with Southern Asia passed through this land. It is bounded by China in the north and east, Afghanistan in the north-west and Pakistan in the west. The Wakhan pan handle (*Ab-i-Panja vale*) of Afghanistan separates the state from Soviet Russia. It is only in the south that it is linked with rest of the Indian Union. Here the State boundaries of Himachal Pradesh (south) and Punjab (south-west) touch the southern boundary of Jammu and Kashmir. With a total geographical area of 2,22,870 square kilometres the state lies between 32^0 17′N to $37^0$5′N longitude and $72^0$40′E to $80^0$30′E latitude. The declaration of cease-fire line on January 1, 1949 left an area of 83,808 square kilometres under the illegal and forceful occupation of Pakistan. In the unprovoked and sudden aggression in October 1962 China captured an area measuring about 41,500 square kilo-

metres. This means that about one third territory of the state is under the illegal occupation of our neighbour Pakistan only.

Physiography

With the exception of tectonically originated Vale of Kashmir, some *duns* and an outer fringe of plain on the south-west the territory of Jammu and Kashmir consists of mountains and hills. The physiography of Jammu and Kashmir "presents a picture of three-storeyed house with three distinct physiographic divisions."[1] The first storey is formed by the piedmont plain bordered by Shiwalik hills in Jammu. The second storey constitutes of Middle Himalaya which border the Kashmir valley on the south. Pir Panjal is a significant mountain of this group. Beyond the Kashmir valley are located Greater or Inner Himalaya running in many north-west to south-east, almost parallel ranges. These ranges constitute the third storey. On minute observation one finds atleast ten significant and parallel ranges in the state of Jammu and Kashmir. These ranges are the Shiwalik, the Lesser Himalaya, the Dhaula Dhar, the Pir Panjal, the Great Himalaya, the Zaskar, the Ladakh, the Kailash, the Karakoram and the Aghil. Besides, the Kunlun range also intrudes in the far north-eastern corner of the state. In fact two huge mountain masses of the world viz., the Karakoram and the Himalaya dominate the landscape of Kashmir, with the Indus entrenched between them. The detailed physiography may be discussed under the following heads :

(a) Outer plain.
(b) Outer hills.
(c) Middle Himalaya.
(b) Inner Himalaya.
(e) Karakoram.
(f) River Valleys.

The Outer Plain

A narrow fringe of a level plain, a continuation of the Punjab plains is situated in the south-western part of Jammu and Kashmir. On its outerside the plain borders with Pakistan. It is otherwise bounded by river Ravi in the east and river Jhelum in the west. A sparsely wooded, broken and hilly terrain which ultimately merges into outer Shiwalik hills bounds it on the north and east. It slopes

1 Raina, A.N., *Geography of Jammu & Kashmir*, (New Delhi), 1971, p. 1.

generally towards south-west and is dissected by the tributaries of the Ravi and Chenab rivers. The average elevation of the plain ranges between 300 metres to 600 metres above sea level. Its width varies from 6 kilometres to 32 kilometres over its entire length of about 240 kilometres.

This plain tract is covered with finer soil which has been deposited by the Himalayan rivers and tributaries. As a result of subaerial denudation many anticlinal tops have been put to differential erosion. At places depressions have been carved out while more resistant, compact and compressed structures have been left as elevated portions. Like the Shiwalik scenery of Punjab this area also consists of successive escarpments and dip slopes intervened with broad longitudinal valleys. The rivulets which are just monsoon torrents bring a huge load of debris from the outer hill slopes and deposit the same while debouching on this piedmont plain. The areas lying along the courses of these streams have been gravely affected by sand, pebbles and gravel. The area situated away from the courses of streams, covered with old alluvium, undulating in nature, experiencing low rainfall and consequently paucity of water is locally termed as *Kandi*.

During south-west monsoon period the streams of Ujh and Tawi alongwith numerous rivulets cause floods in this region. Before the construction of bridges on these streams and rivulets it was difficult to maintain a link between trans stream villages. Only some experienced swimmers could cross the swollen water bodies with the help of *mashaks* i.e. inflated animal skins. After the accession of state with India the town of Jammu has been linked by means of an all weather metalled national highway and a rail route with Pathankot. Now with the march of five year plans the topography of this tract is fast changing. With the raising of river bunds, deepening of stream beds and adoption of anti soil erosion measures the menace of floods and consequent expanse of sands, gravel and pebbles has been effectively checked.

The Outer Hills

The outer hills are also known as outer Himalaya but are popularly known as Shiwalik hills. The word Shiwalik means the edge of the roof of Lord Shiva's dwelling. With this meaning, the term was first used by Mughal emperor Babar in his memoirs. Some people are of the opinion that this word is the corrupted form of one and a quarter lakh (sava-lakh). Since the Shiwalik hills spread along the entire length of Himalayan foot-hills the number of all these ranges and ridges is taken to be about one hundred twentyfive thousands or

sava-lakh. In fact after the emergence of mighty Himalaya a tract of sediments containing young marine deposits, sandstone, shales and conglomerates buckled up into folds south of the Himalayan foot-hills. Today these folded ranges are called as Shiwalik hills and gain prominence at many places like Haridwar. But at other places where these folds have been buried beneath the Himalayan recumbent folds, the Shiwaliks do not appear as separate ranges.

Because of their location these Shiwaliks can also be named as Jammu hills. Rising from Punjab plains and carrying a gentle slope these hills attain a height of 600 metres in the vicinity of Jammu. Thereafter the hills abruptly lead to steep escarpments. These hills constituting young Tertiary alluvium form a divide between the Punjab plains and Middle Himalaya. Beyond escarpments the hills follow a succession of north-west to south-east parallel ridges. In these parallel ridges are situated some valleys known as *duns*; Udhampur and Kotli being typical duns in this area. The *duns*; continue upto Devsal in the west. The western part of the Outer hills, a vast and varied tract, is a wide expanse of massive height of 1200 metres above sea level but the more inwardly situated ranges composed of old alluvium attain higher elevations ranging from 1800 to 2400 metres above sea level. Orthoclinal type of structure is witnessed in these outer hills. In other words these hills exhibit steeply sloping scarps towards the fringe plain whereas they have gentle slopes towards the Himalaya.

The Middle Himalaya or Pir Panjal

Pir Panjal is in a way, a bifurcation from the main Himalaya and in the words of D. N. Wadia it forms the front of "Great Kashmir Nappe". This majestic snow covered range, being nearer to the plains looks more prominent than the main Himalaya. These higher mountains range in altitude from 3,000 to 5,000 metres above sea level. The ridges branch out in irregular directions and it would be apt to call it a fanlike branching or convergence of ridges. The entire mountain mass extends from Kishanganga gorge in the west to Deo Tibba in Himachal Pradesh. The streams have cut very deep valleys, and produced precipitous falls. The rivers Jhelum and Chenab have cut tremendous gorges at Uri and Kishtwar respectively. The gorge at Kishtwar is a remarkable physical feature. The bottom of the gorge is about one thousand metres deep, whereas the flat terrace of Kishtwar hangs like a ledge in the gorge one thousand metres above the river bed. The Pir Panjal has three mountain passes on it namely Banihal Pass (2,832m), Pir Panjal Pass (3,494m) and Bundil Pir Pass (4,200m). The Mughals used Pir

Panjal Pass and probably after the name of this pass the Middle Himalaya in this section are known as Pir Panjal. As many as one dozen peaks on these mountains exceed 3,500 metres in elevation. The prominent ones being Tatakuti (4,742m), Brahma Sakli (4,705m) and Apharwat (4,143m). Continuing beyond into the Dhauladhar ranges of Himachal Pradesh the Pir Panjal mountains show north-west to south-east trend. The ridges slope gently towards Kashmir valley but show steep escarpment like slopes towards the plains. In fact the morainic material left by the glaciers during the glacial epoch on the northern slopes of the Pir Panjal ranges has reduced the degree of gradient. Because of no filling by glacial deposits on the southern slopes these are extremely rugged.

Though the Pir Panjal mountains represent the Middle Himalayan ranges yet these are structurally quite distinct from the Himalaya. Consisting of highly compressed and altered rocks of Carboniferous and Eocene periods the Pir Panjal were uplifted to their present great height recently, only in Pleistocene age. The rise of these ranges resulted in the cut off of river Jhelum and consequently a lake called as Karewa lake by geologists came into being. The deposits emerging out consequent upon the draining of Karewa lake, have been termed as *Karewas* by the earth scientists. The presence of volcanic rocks like agglomeratic slates in these ranges speak of volcanic activity also, whereas during the glacial era the area became intensely cold and witnessed the development of massive glaciers. Many interesting features were produced by glaciation in the past. At present about thirty small glaciers are found on the northern slopes of the Pir Panjal in contrast to the eastern side where Tibetan side has comparatively little ice. Only a couple of these glaciers have real valley projections, whereas most of these are mere cakes of ice in wide cirques which have become ice collecting centres.

The Inner Himalaya

The Greater Himalaya or Inner Himalaya is the innermost line of high ranges that rise above the permanent snowline with an average altitude extending to 7,000 metres above sea level. The Great Himalaya is anchored at Nanga Parbat (Diyamir, 8126m) peak at its western end. About thirteen peaks cross a height of 6,000 metres in Great Himalaya whereas a score of peaks range between 4,500 to 6,000 metres in height. A massive glacier named Diyamir or Rakiot descends steeply from the awe inspiring and breath taking Nanga Parbat towards the Indus Gorge. This badly crevassed glacier breaks into ice blocks and ice falls. This mighty

peak is made up of igneous rocks like phyllites, granites and gneisses. On its north-western slopes many huge glaciers flow out. This Great Himalayan system is crossed at Burzil pass (5,425m) below Nanga Parbat. Important passes located on the Great Himalaya are Ruberung La (6,401m), Poat La (5,716 m), Sersank Pass (5,716m), Umasi La (5,294m), Singo La (5,097m), Sir Sir La (4,990m), Lanak La (4,964m), Bara Lacha La (4,891m), Burji La (4,816m), Kanzam La (4,551m), Chilung La (4,401m), Fotu La (4,094m), Zoji La (3,529m). Kunji La, Singi La, Kisgan La, Salsaida and Photi La are other notable passes of these ranges. A hot water sulphur spring is located at an elevation of 4,500 m about 12 km north of Kiagar and quite close to Puga.

The Great Himalayan mountain runs in a north-west to south-east trend in the state. Near Sonamarg it is crossed through by Zoji La pass where the Kolachoi peak (5,425m) appears in its majesty. To the further east is found the dolomite Amarnath cave. The dripping ice water in this cave freezes into ice pillar. Held sacred by Hindus the cave is visited by numerous devotees on the full moon of August to worship the *Shiva-Linga* looking ice pillar. The streams have created many transverse ridges which dissect the mountain ranges and produce transport lines mainly for pedastrians and pack animals.

The Central Himalayan range bifurcates near Kulu. One of the bifurcated branch enters Jammu and Kashmir as Zaskar range which otherwise continues to be the part of Inner Himalaya. The eastern part of the Zaskar range presents an intricate and complex structure. This range made up of crystalline rocks is greatly glaciated. Interspersed in between the Zaskar ranges are found the glaciated valleys. Farther east the peak of Nunkin (7,135m) is quite lofty. The higher peaks in this zone are located on a broad plateau like range which is otherwise badly eroded.

"As a tectonic unit, the Great Himalaya is made up of the roots of the Kashmir nappe, the principal geo-anticline within the main Himalayan geosyncline, consisting of the Archean and pre-Cambrian sedimentary rocks together with large bodies of intrusive granites and basic masses."[2] The intrusions caused by granitic rocks belong to post Cretaceous period. These were probably associated with the real activity of mountain building.

Hazara and Ladakh ranges are two trans Indus ranges. Hazara range is quite similar to the main range in physiography and structure. About a score of peaks range in altitude from 4,500 metres to 6,000 metres. The range is crossed through the passes of Dadariti,

2 Wadia, D.N. *Geology of India*, (1939), London, p. 312.

Shaghichi, Baregh and Kinejut. The Ladakh range lies between the Shyok and Indus rivers. This range in fact is a bifurcation of Zaskar range. The bifurcation occurs at Ruphu by a sharp bend of Indus. From the confluence of Indus and Shyok the range continues towards east and also enters western Tibet. This range composed of crystalline rocks has been cut into gorge like deep valleys by the streams flanking it. About nine peaks on this range have an altitude exceeding 6,000 metres. The range is crossed through the passes of Chorbat, Chang La and Tsaka La.

Karakoram Range

Getting out from the Pamir Knot, *The Roof of the World* the mighty Karakoram enters the state of Jammu and Kashmir in a north-west to south-east trend. The range is located north of Great Himalaya and since most of it is under a perpetual cover of snow it is apt to call it 'Shining Crest of the earth' i.e., *Vasudha ka dhawal Sheersha.* The second highest peak of the world K2 (Mt. Godwin Austin) with an altitude of 8,611 metres above sea level is situated in the Karakoram. Gasherbrum, another peak (8,100m) crosses eight thousand metres mark. About half a dozen of peaks raise their heads above 7,500 metres. These notable peaks are Dast-i-Ghill (7,885 m), Masherbrum (7,850 m), Rakaposhi (7,788 m), Trivor (7,788 m), Saser Kangri (7,672 m) and Terem Kangri (7,500 m). The Golden Throne (7,200 m) and Muztagh Tower (7,259 m) are other worth mentioning peaks. Since unlike Himalaya the whole range stands over an elevated ragion with more than 3,000 metres of height, the peaks do not appear as tremendous and prominent as those of the Himalaya. In the east the range looks to be merged into the Ladakh tract, hence it seems to have been subdued there. The important passes located on these mighty mountains are Muztagh Pass (5,700 m), Marpo La (5,611 m), Karakoram Pass (5,575 m), Hispar Pass (5,352 m) and Saser La (5,300 m). It is observed that, "even the mountain passes along its crest line stand higher than Mt. Blanc, the highest peak of the European Alps. The assembly of significantly high peaks is not found in any other part of the world. Even the neighbourhood of Mt. Everest lacks in having an assembly of so many high heads."[3]

A number of glaciers crawl down the slopes of the Karakoram. Some of these glaciers are amongst the largest glaciers of the world located outside the Arctic and Antarctic circles. The surface mo-

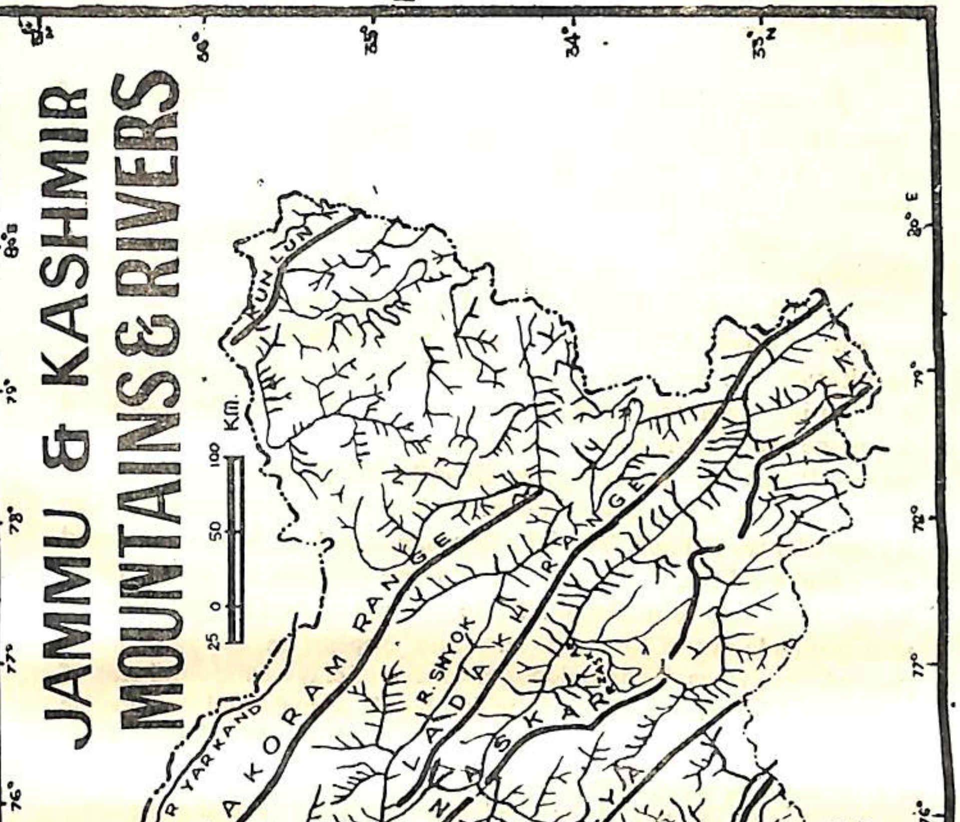
3 Raina, A.N., *Kashmir Region in India,* (Ed. R.L. Singh), Varanasi (1971), p. 355.

raines have completely covered these glaciers. This morainic material is supplied by the disintergration of rockwalls caused by severe frost action. At certain places even grasses and conifers grow on the surface moraines and thus provide camping grounds for nomadic shepherds. In recent years old terminal moraines away from present snouts, abandoned lateral morainic deposits away from but parallel to the glaciers have been observed. This clearly shows that glaciers have been subjected to melting and retreat.

Many of the streams flowing in the vicinity of Karakoram originate as snouts from the glaciers. Siachen the longest (72 km) glacier gives rise to the Nubra stream which joins the Indus through Shyok river. The Hispar (58 km) glacier falls into the Indus river. Batura glacier (61 km) joins the Indus through the Hunza river. The giant glaciers of Biafo and Baltora discharge in the Shigar stream, a tributary of Indus. Chogolungma and Rimo glaciers fall in the Shigar and upper Shyok respectively. As already noted, in the post Ice Age the glaciers have started melting and retreating. Hence the present mass of ice is quite insufficient to maintain the volume of these giant ice streams. "The valleys of Nubra, Shyok and Shigar rivers are choked with old glacial till, morainic debris and outwash material from the present snouts of the glaciers. This is especially so on the northern slopes of the Karakoram range, where glaciers flatten out and discharge streams, laden with outwash, over huge accumulations of moraines and talus cones."[4]

In the north-eastern part of Kashmir between the Karakoram mountains and Kunlun mountains is situated a badly dissected intermontane plateau, popularly known as Aksai Chin. In local usage it is known as Lingtze Tang Plain. In the Ice age the entire tract was subjected to excessive glacial action. As a result thereof numerous lakes of various sizes dot the landscape here. These lakes collect the drainage of surrounding area and do not allow any outlet to collected water. This way the salinity of water in lakes is increasing progressively. The average elevation of this tract is about 4,500 metres above sea level but some residual highlands attain the elevation of above 6,000 metres. This entire tract is the administrative district of Ladakh which because of its isolation has a different culture. Aksai Chin is not the only plain found here but Depsang plain, Soda plains, Ling Zi Tang and Chang Chenmo are other notable plains. The Soda plains have been named such because of the Soda deposits found in the saline lakes dotting the landscape there.

4 Bose, S.C., *Geography of Himalaya*, NBTI, New Delhi (1972), p. 18.


JAMMU & KASHMIR
MOUNTAINS & RIVERS
25 0 50 100
Km.
KARAKORAM RANGE
LADAKH RANGE
ZASKAR RANGE
GREAT HIMALAYA
PIR PANJAL RANGE
KUN LUN
R. YARKAND
R. SHYOK
R. GILGIT
R. SIND
R. JHELUM
R. POONCH
R. CHENAB

River Valleys

The mountainous state of Jammu and Kashmir consists of many river valleys. The valleys of Kashmir, Gilgit, Sind, Hunza, Shigar, Zaskar, Shyok and Nubra are notable among a large number of valleys found on the length and breadth of the state.

The enchanting Vale of Kashmir is situated in between the Pir Panjal mountains and *the Himadri*, i.e., Great Himalaya. Situated in the flood plain of Jhelum, the old lacustrine basin of Kashmir has an area of about 4,865 square kilometres. With its floor standing at an altitude of 1,600 metres above sea level the Vale measures about 136 km in length with a maximum width of 40 km. In geological language the Vale is a great syncline seated on the back of a vast nappe. It has been customary to describe the Kashmir valley as 'an oval plain girt with mountain chains', but no geometrical figure can present the true shape. The lake deposits called as *Karewas* spread as terraces all round the valley. But these terraces are better developed in the southern section. These terraces of 100 to 200 m thickness protrude out of the mountains and appear as dry table lands pierced by ravines. "These deposits consist of clays, sands and silts of undoubted lacustrine origin, in which bands of marl and of loessic silt, together with lenticles of conglomerate from old deltaic fans, bear witness to many fluctuations of level."[5] These lacustrine deposits are being continuously washed away from the central portion by river Jhelum and its tributaries. At places the river erosion has led to the formation of 130 to 140 metre high bluffs and terraces. The valley is dotted with many large and small lakes as also by marshes. Apart from being the remnants of the ancient *Satisar* lake, these have probably been also created by the slight rise of the tract near Baramulla which choked the outlet. The Wular Lake, the largest (16 km × 10 km) natural lake of India is situated near Baramulla. The surrounding hills present quite gentle slopes and the valley is reached through Pir Panjal Pass and Banihal Pass from the Punjab plains. Compared to a diamond ring with a green stone set in the middle, the Vale of Kashmir has also been called as an emerald set in pearls, a land of clear streams, beautiful lakes, lush green turf, magnificent trees and majestic mountains. As quoted by Lawrence, Pandit Kalhana the author of Rajtarangini says, "It is a country where sun shines mildly, being the place created by Kashayapa as if for his glory. High school-houses, the saffron, iced water and grapes, which are rare even in heaven, are common here. Kailasa is the best place in the three worlds, Himalaya the best part of

5 Spate, O.H.K., *India and Pakistan*, Methuen, London (1963), p. 374.

Kailasa, and Kashmir is the best place in Himalaya."

The north-western corner of the state is occupied by Gilgit valley. The river Gilgit drains a fertile basin surrounded by lofty mountains. To the north-west of Gilgit are located the wild mountains of Kafirstan whereas Hunza valley, a secluded region of extraordinary beauty lying under the shadow of Rakaposhi is situated to the north-east. To the south-west of Hunza valley lies the Shigar valley which is an elongated gravel filled basin. Farther east are found the remote valleys of Nubra and Shyok. Sind Valley is the most beautiful tributary valley of Kashmir. The upland valley east of Jhelum is Liddar valley. Glacial streams, terminal moraines and other features produced by the glacial action add a lot to the charm of scenic splendour here.

Drainage

The drainage pattern as found in the state of Jammu and Kashmir is called as 'antecedent drainage pattern' by the earth scientists. For a common man it means that the rivers of this region are older than the mountains. When the process of mountain building started the rivers were already in existence. No doubt the process of mountain building led to the folding, faulting, thrusting, contortion and upheaval of rockbeds but the streams maintained their own channels by way of greater and effective erosive action. By intense vertical erosion the rivers kept pace with the rise of mountains. The resultant transverse gorges and canyons formed by these streams bear testimony to this fact. Dr. A. N. Raina observes, "Even the rivers of Jammu taking their origin from the southern slopes of the Pir Panjal and flowing across the axis of the folding of the Jammu hills have tackled successfully the recent upheavals of the minor folded ranges in this region. Some of the Himalayan valleys are exceptionally high (more than 3,000 m), where streams are found modifying the glacial valleys. Shyok, Nubra and Shigar valleys are some good examples."

Rivers have a special geographical significance for the state of Jammu and Kashmir. The entire landscape of the state has been eroded by the rivers and divergent types of topography has been produced. The Indus, the Jhelum, the Chenab are the three important rivers of the state whereas the Ravi also touches the fringes of the state in south. Poonch, Tawi, Ujh, Liddar, Kishenganga, Sind, Shyok, Nubra, Shigar, Hunza, Gilgit and Astor are other significant streams of Jammu and Kashmir.

The Ravi (*Vedic - Purushani; Sanskrit - Iravati and Greek - Hydrotes*) is the smallest of the rivers of Jammu and Kashmir. It rises

at Bara Bhangal in Himachal Pradesh. Fed by two glacial snouts Bhadal and Tant Gari the river leaves that area through a precipitous gorge. The southern slopes of the Pir Panjal range and northern slopes of the Dhauladhar range are drained by this river. The Ravi leaves the Himalaya at Bhasoli and passes close to Kathua and Madhopur.

The Chenab (*Vedic—Asikni, Sanskrit—Chandra Bhaga*) is a river formed by the joining of Chandra and Bhaga streams in between the Great Himalaya and Pir Panjal. The Chandra originates from a large snow bed south of Bara Lacha. Flowing through the Pangi valley (Chamba—Himachal Pradesh) the Chenab enters the state of Jammu and Kashmir at Padar. From Tandi to Kishtwar the stream gives a fall of about 7 to 8 metres per km. This typical Himalayan stream leaves the Himalayan mountains and enters the plain at Akhnoor. The river has many rapids and gorges in its upper course. At Kishtwar the river receives a perennial tributary in the form of snow and icefed Wadvan stream. On reaching the plain tract the Chenab spreads out in a big fan. "There are many broad stream beds full of boulders rather than water. The boulders are not the creation of the present cycle of erosion but have been fetched from old boulder beds."[6] Munawar wali Tawi is another notable tributary of Chenab. The joint waters of Naushehra Tawi and Thande Pani wali Tawi are the source of this stream. Munawar dun has developed in the valley of this stream.

The Jhelum (*Kashmiri—Vyeth; Sanskrit—Vetasta; Greek—Hydaspes and Bidurpes of Ptolemy*) is the main artery of the valley with its numerous tributaries, lakes and canals. The river comes out of a bubbling spring, Verinag under the steep scarp of a rock on the Pir Panjal, but many ancient Hindu scriptures believe *Vethvatru*, a spring little below Verinag, as the source of Jhelum river. The first important tributary it receives is Liddar having its source at Sheshnag. The Vishav is another tributary which irrigates the Kulgam area 'the rice bowl of Kashmir' and finds its way into the Jhelum near Bijbhera. The Aharabal waterfall presents a picturesque view. Rambiara, Romushi, Sukhang and Dudhganga are other affluents of the Jhelum. Sind that has its source at Gangbal lake on the Harmukh mountains is an important tributary of the Jhelum. The headwaters rise at the Zoji La and the Amarnath peak in a limestone cave. After draining the loftiest mountains the stream joins the Jhelum at Shadipur. At the confluence a delta extending over a large area has come into being. This sandy loam built but swampy delta is used for cultivation. On

6 Bose, S.C., *op. cit.*, p. 126.

its way to Wular lake the river passes near Dal lake the 'flood lung' of the Jhelum. The lake and river are linked by way of *Tsunti Kuhal* i.e., 'Apple Channel'. In times of flood the waters of Jhelum are diverted to the lake. The Jhelum enters the Wular lake from the south-east and leaves at the west near Sopore. Sopore is a typical delta town formed by siltation. When the river leaves the Vale at Baramulla it is called as Kashur Darya. Through a narrow gorge the river reaches Domel (Muzzffarabad) to join the river Kishenganga and beyond this point it is known as Jhelum everywhere. From Domel to Mirpur the river runs with the international border between India and Pakistan. In this tract it receives many tributaries but the Poonch meeting at Mirpur is important one.

The Indus (*Sindhu in Sanskrit*) enters the state near the Chinese frontier where its confluence with Gurtang stream takes place at a height of 4,245 metres. Descending thousand metres the river enters a narrow gorge with alluvial patches given to settlement and cultivation on both sides. By the time it reaches Leh, the capital of Ladakh, river receives Hanle and Zaskar as its left hand tributaries. Thereafter the river passes through a deep gorge and after coursing 250 km it receives river Shyok with equal volume of water. Other important right hand tributaries are Shigar and Gilgit. The Shigar which drains the melted waters of Karakoram glaciers meets the Indus just opposite Skardu. After that the river takes a southerly course till it reaches its confluence with its left hand tributary, Astor. Then the river takes a western course near the western flanks of the Nanga Parbat. The river leaves Kashmir territory near Sazin to enter Pakistan.

Lakes and Springs

A number of lakes are found in the state and majority of those found in the Kashmir region are glacial in origin. Among the trans Himalayan lakes most important are *Pangkong Tso Tisi moriri* and *Lingtzi Tang*, all salt water lakes. The *Pangkong Tso* is about 64 km in length with a width varying from 3 to 6 km. No doubt these lakes are diminishing in size but their salinity is increasing. *Tso Morari*, *Kyum Tso*, *Kiagar Tso*, *Kar Tso* and *Startsopuk Tso* are the important lakes of the East Zaskar tract.

The Vale of Kashmir abounds in mountain tarns, beautiful lakes and swampy lagoons. The Dal, the Wular and the Manasbal are the loveliest lakes of the valley, because of the varied scenery rendered by the surrounding mountains. Wular the largest natural lake in India measures 16 km by 10 km and is surrounded by the

towering mountains. The streams of Madmati, Erin and Bohnar flow into the lake whereas the Jhelum seeks a passage through its southern part. "In the north-east corner is an island made by the great Kashmiri king *Zain-ul-Ab-ul-Din* and the ruins on it show that it must have been a place of great beauty. It is said that the good king built the island as a storm refuge for boats.... It is said that where the blue waters of the Wular now rest there was once a great and wicked city which was swallowed up in an earthquake, and the floods completed its destruction. The meaning of the word 'Wular' is cave, and legend goes that the remains of the wicked city have been seen by boatmen."[7]

With its pink lilies the deep clear water lake of Manasbal gives a very charming view because of the grand surrounding mountains forming a contrast to the gentle beauty of lake. Manasbal is joined with Jhelum by way of a canal. Some of the hot water springs situated in its vicinity do not freeze even during frozen winters.

Dal lake measuring 6 km by 4 km lies close to Srinagar. In the words of Lawrence "dal lake, is perhaps one of the most beautiful spots in the world". The shadows of the surrounding mountain ridges and shore-side trees give a grand view. The Hari Parbat on the right, Takht-i-Suleman on the left and the picturesque fort full of recollections and grandeur of past lend the basic charm to the lake. The water is quite soft and clear. It is said that the Kashmir woollen shawls owe much of their excellence to being washed in the clear and soft waters of Dal lake.

Mansar is a small lake situated to the south-west of Jammu. Another lake lying about 8 km. west of Mansar in Surimsar lake. Sonsar lies to the north of Patni top. All these sites have been developed as tourist attractions.

Among the springs Achabal, Verinag, Sheshnag, Anantnag, Maliknag, Kokranag and Chashmashahi are worth mentioning which provide beauty and pleasure. All these springs are associated with the quaint, old snake worship and that is why the names end with nag. All these springs are full of crap fish.

Climate

The climate of the state of Jammu and Kashmir is quite varied because of its location and topography. During one day's journey one may find different types of climate. This variation in climate, apart from normal factors affecting climate of a place is the result of two special factors, i.e., altitude and aspect. The altitude controls

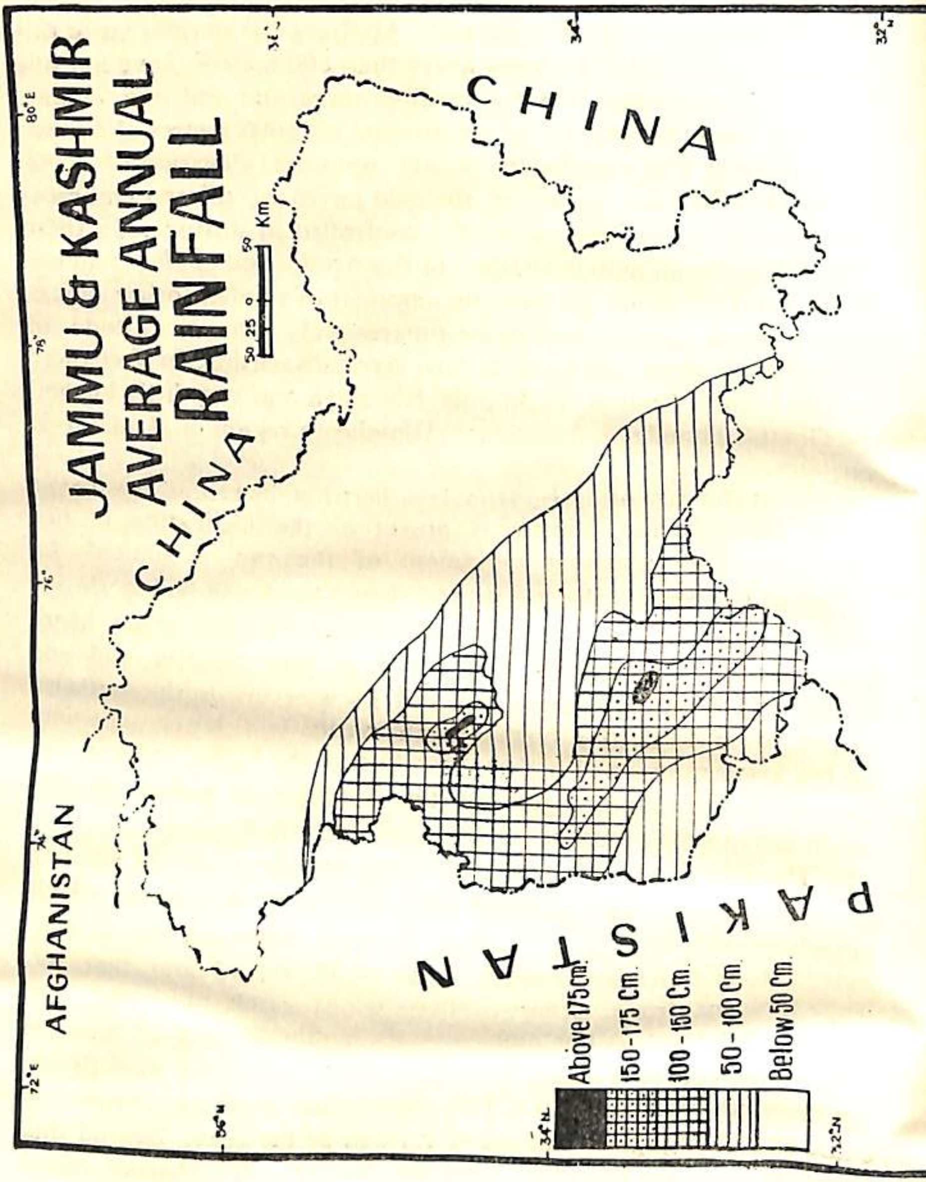
7 Lawrence, W.R., *op. cit.*, p. 20-21.

both temperature as well as rainfall. Applying the normal lapse rate the plains and valley bottoms lower than 600 metres have hot and moist tropical climate. It starts cooling therefrom and the climate becomes cool temperate at an altitude of 2,000 metres above sea level. Beyond that the climate is cold upto an elevation of 3,000 metres. Further and higher up the cold increases till one embraces the snowline which itself is mainly controlled by altitude. On these lofty tracts the climate is similar to the Arctic and Polar regions. From rainfall point of view, the amount of rainfall, other things being normal, goes on increasing progressively upto an altitude of 2,500 metres above sea level. It then starts decreasing. In fact there is little rainfall beyond the Middle Himalaya and very little beyond the Greater Himalaya. The Trans Himalayan region of Ladakh is very dry.

As in the case of entire Himalaya here too the second significant factor affecting the climate is apsect or the inclination of the sun rays. The apparent movement of the sun is limited to Tropic of Cancer in the north and hence the south facing slopes of the mountains are more sunny and rainier. On the other hand the lower slopes behind the ridges fall in rain shadow and are mostly dry. Resultantly more rain and snow occurs on the southern slopes. More dessication further north results in a lower snowline on the lower ranges and higher snowline on the higher ranges. In the case of individual ranges too the snowline is higher on the south facing sunny ranges.

The direction and intensity of winds greatly affects the amount of precipitation. The summer or south-west monsoons which already contain little of moisture by the time they reach this western most state of India occasionally cross the Pir Panjal and that too when they are strong. Otherwise these winds reach only upto the Middle mountains. A line alongwith the southerly edge of the Pir Panjal moving to Poonch and Uri generally forms a wind divide for the south-west monsoons. This means that south-west monsoons cause almost negligible amount of rainfall to the areas beyond this imaginary line. On the other hand the western disturbances affect this state to the maximum in India and this results in copious rainfall and heavy snowfall in winter.

Temperature variations over space and time are also recorded to extreme limits. Generally speaking Leh is the coldest place whereas Jammu is the hottest one. January is the coldest month in the entire state. July is the hottest month except in Jammu region which experiences June as the hottest month. Mean monthly temperature ranges from 14°C in Jammu to —17°C in Dras tract of Leh. Exceptionally high temperatures were recorded (47.2°C) in Jammu


JAMMU & KASHMIR
AVERAGE ANNUAL
RAINFALL
50 25 0 50 Km
CHINA
CHINA
AFGHANISTAN
PAKISTAN
Above 175cm.
150-175 Cm.
100-150 Cm.
50-100 Cm.
Below 50 Cm.
80° E
78°
76°
74°
72° E
36° N
34°
32° N

on June 12, 1953 whereas exceptionally low temperatures were recorded at Dras (—45°C) on December 28, 1910. Jammu the winter capital of the state recorded the highest temperature in India in the year 1972. Srinagar recorded its highest temperatures on July 10, 1946 (38.3°C) and its lowest temperatures (—20°C) on February 6, 1895.

As far as precipitation is concerned the state receives it both in the form of snow and rain. As already noted the monsoons are active south of the Pir Panjal but western disturbances are active throughout the state. Sonmarg with about 185 cm of annual average rainfall is the wettest part of the state and Gilgit (5 cm) and Ladakh (8 cm) are the driest parts of the state. The Vale of Kashmir receives about 68 cm of average annual rainfall but the outer plain and especially the tract in the vicinity of Jammu gets about 120 cm of average annual rainfall. The monsoonal rainfall lasts from July to mid September but more active in outer hills and plain. About 40 per cent of the total annual rainfall of the state comes through the south-west monsoons. From December to March the state comes under the influence of western disturbances which are more active in this part than any other part of the country. About 40 per cent of the precipitation of the region is also received through the western disturbances in winter. Snowfall is the significant associate of these disturbances and it is fairly influenced by the altitude. Comparatively high relative humidity, mist, fog and higher incidence of snowfall are the chief characteristics of winters in most of this region.

Keeping in view the climatic variations over time and space the entire state can be divided into four climatic sub-divisions.

The Jammu region or the outer plain and the outer hills experience humid subtropical or monsoon type of climate. The temperature ranges between 33°C (June) to 13°C (January). Because of the proximity of hills this tract is saved from scorching *loo* but does become a victim of cold waves in winter. Hot winds do blow during summer months but do not assume such serious postures as in Punjab and Haryana. The region experiences double maxima of rainfall one in summer (July to mid September) because of south-west monsoons and the other in winter (December to February) because of western disturbances. November is the driest month in the year.

The Himadri and the Pir Panjal tracts which separate the Kashmir valley from Ladakh and Jammu regions respectively have been grouped together as far as their climatic conditions are concerned. Because of their location and altitude the temperatures remain low throughout. Only the southern lower slopes receive

monsoonal rainfall. Over the rest of the region the precipitation is moderate and mostly in the form of snow.

The climate of *Kashmir valley* is quite different. The monsoons almost die out by the time they reach southern flanks of the Pir Panjal. This means that the summers of the Vale have very little in common with rest of India as far as general winds, pressure and rainfall is concerned. From April to June weather conditions are quite pleasant. By mid June the heat and humidity start increasing. Because of high temperature and high humidity the weather becomes very much oppressive in July and August. The haze covers the entire valley during these months and it very much obstructs the panoramic view of surrounding mountains. The autumn months with clear sunny days are more pleasant than summer even. By the mid December first snowfall is expected and this brings in the real winter. Severe winter lasts for about 70 days. "Winter is a hard time for men and animals in Kashmir, and when wood and charcoal are dear the poor citizens of Srinagar are much to be pitied."[8] The western disturbances cause heavy snowfall. The cloud cover rules the sky from mid December to February. January experiences the lowest temperatures when the mercury often falls as low as —17°C. Less radiation during night increases the minimum temperature whereas the clouds reduce the maximum temperatures. The western disturbances sometimes cause blizzards, close high passes and dislocate the air traffic. The warm winds blowing from the south-east herald their approach. Cirrus, cirro-cumulus and stratus clouds appear on the skies in gradual succession. This is followed by drizzles in lower altitudes, sleet higher up and snowfall further up. At their end freezing cold blizzards and strong northerly winds prevail.

In *Ladakh region* the extreme continentality and high altitude impart a character similar to the cold highland type. About five months experience temperatures below freezing point. "Because of thin atmosphere, the radiation and insolation are extremely rapid resulting in extremes of temperature in shade and sunshine, which may cause frost bite and sun-stroke at the same time."[9] There is generally a difference of about 40°C between the readings of the exposed sun thermometer recording and the air temperature in shade. The monsoon is utterly weak because of Himalayan barrier. About 40 per cent of the 11·5 cm total annual precipitation is received in the months of December to March.

On the whole in a wider region as the state of Jammu and

8 *Ibid.*, p. 26.
9 Raina, A.N., (In India) *op. cit.*, p. 360.

Kashmir with majority of the area with high altitude and valley-range configuration it is not the macro-climates but micro-climates which affect the human habitations, natural vegetation and occupational patterns.

Natural Vegetation

The climate in the state of Jammu and Kashmir changes from humid tropical to temperate and finally to Arctic and Tundra type near the snowline. The slope, altitude, aspect and lithology also change from place to place. These factors in combination have therefore, resulted in a unique type of vegetal cover in this mountainous state. Deciduous, conifers, shrubs, scrubs and meadows, all sorts of vegetation are found within the state boundaries. Kashmir valley is the thickly forested area where districts of Baramulla and Anantnag have 71 per cent and 60 per cent of their areas under forests respectively. The Kashmir valley on the whole has about 58.5 per cent of its area under forests whereas the Jammu tract has about 46 per cent of its area under forests. The districts of Udhampur (53 per cent), Doda (50 per cent), Jammu (44 per cent), Poonch (42 per cent), Srinagar (29 per cent) and Kathua (24 per cent) have a quarter to one half of their total areas under forest covers. "Species have strong regional association with the punctuation by the altitudinal zones though in general conifers account for about 85 per cent of the forest area."[10]

The Scrub-forest dominates the outer plain and Shiwalik ranges. The vegetal cover in this region "governed by the character of the soil and the circumstances of climate, is for the most part of the dry tropical character, the heat being enough to sustain many plants that flourish within the tropics, while the moisture is insufficient to enable them to grow within great luxuriance, and the cold weather of winter tends also to check them."[11] However on some of the hills more or less dense forests of acacias and *Bers* intermingled with *Vasaka* (*Brainkar*) are found. Elsewhere *toon*, *grewia*, mango, *shisham*, *pipal*, bamboo, palm and banyan trees are found. Many aquatic plants are found in and around lakes. On the higher parts of Shiwalik hills the pine trees appear.

On the southern rainier slopes of the *Pir Panjal* the vegetal cover is comparatively thinner whereas the northern slopes are covered with thick coniferous forests. The mountains have a different type of vegetation as compared to the mixed deciduous forests of outer hill zone and temperate forests of the Vale. Pine and

10 *Ibid.*, p. 363.
11 Drew, Frederic, *The Northern Barrier of India*, (1971) Jammu, p. 15.

deodar are the common trees found on the northern slopes. The lower slopes of the Pir Panjal mountains contain nutritive grasses and many medicinal herbs. These grasses function as camping grounds to the *Gujjars* and *Bakarwals* during trans humance.

The vegetal cover of the *Kashmir valley* forms one of its greatest charms. "The delightful pine trees, the magnificent walnuts, the endless willows, the poplars and the elms, the countless orchards of apples, pears and apricots give the valley the appearance of a well wooded park."[12] There are swamps also in the valley where many aquatic herbs grow. The marshy areas are also covered by well marked willows. The fir trees dominate the scene on higher ground. Deodar, stately chinars, walnut, chestnut, chilgoza pines, birches, junipers, rhodendrons, mulberry and oak are some of the other trees grown in Kashmir and surrounding valleys. On many mountain slopes nutritive grass dotted with herbs is grown. Such meadows are known as *marags* in local language.

The Ladakh region because of the paucity of rainfall and lack of humus in the soil is almost devoid of vegetation. Only few patches of Himalayan meadows can be located in this region. However, stunted cedars and willows can be seen on moister patches. Some plants grow in rocky fissures and chasms and many types of sweet edible berries also occur. In the rest of the region mixed and unclassified type of vegetation is found which may safely be styled as mountainous vegetation.

The state is no doubt rich in forests but owing to inaccessibility, only 40 per cent of its demarcated forests are fit for commercial exploitation. The forest exploitation contributes about 17 per cent revenue to the state. In the year 1913 the then British Government persuaded the state authorities to manage the forest wealth scientifically and since then it is being done. About 90 per cent of state's demarcated forests are under working plans. But the real problem lies in the undemarcated forests and meadows. Unregulated grazing and felling of trees have led to the problem of soil erosion in many parts of the hills.

Forest Products

Forests have a great significance for this state. Besides adding to charm and aesthetic beauty the trees extend many benefits to the local populace. It is generally observed that Kashmiris put nearly each and every plant and tree to some use and attribute medicinal properties to every growing thing. Condiments, drugs, dyes-tans,

12 Lawrence, W.R., *op. cit.*, p. 24.

fibres, fodders, foods-fruits, medicines, scents, poisons, timber, yeast, adulterants, alkalies etc. many items have been obtained from different plants and trees in Kashmir since time immemorial.

Zirah Siyah i.e., Carum Sp. grown on Karewas of Kashmir is an important ingredient of condiments. *Bhang* i.e., Cannabis indica growing in profusion along the banks of rivers is turned into many drugs. The fibre obtained from this plant also furnishes strong and durable ropes. Since ancient times the skillful dyers have been obtaining soft dyes for woollen garments from the barks of many trees. Even now brown dye is obtained from the outer rind of the walnut. But now the availability of synthetic dyes at cheaper rates has completely ruined this vocation. The boatmen of the valley require ropes of good quality. The fibre of the *krisham* or *iris*, *yechkar*, *vandil*, *koin* plants is used for making twines, ropes, mats etc. The birch leaves (*bhoj patra*) have been put to many uses in this region. Fodder for cattle, goat and sheep is obtained from grasses, mulberry leaves, willow leaves etc. Fruits like apples, pears, apricots, plums and dry fruits like almond, walnut, chilgoza etc. are obtained from trees. The scents like *guggal dhoop*, *kasturi* and *kuth* are also got from trees and plants.

The greatest benefit obtained from the forests is in the form of timber. The trees like deodar, blue pine, spruce, silver fir, alder, elm, ash walnut, chestnut, poplar, maple, willow, birch and mulberry etc., provide timber for many purposes. The best of all the timbers produced in the state is supplied by deodar. Impervious to water the deodar timber is much in demand for houses, boats and bridges. It is quite possible that in old days the deodar forests covered much of the Jammu region and entire Kashmir valley but the building requirements of Srinagar soon exhausted the forests in its vicinity.

Blue pine found extensively in the state is used in house building because of its durability. Pine forests are open forests and very few shrubs grow as undergrowth. Only in rainy season the grasses appear. Because of the inflammable resin in these trees the forest fires are common in pine forests. Resin is extensively tapped in southern Kashmir. White resin of the pine is also used for medicinal purpose and applied on wounds. To protect themselves against the attack of water insects the black pitch (*Kilam*) got from the pine roots is applied on their arms and legs by the paddy field workers while working in knee deep water. Poplar, kail, elm etc. also supply timber for house building. The silver fir is free from knots and is also easily workable. Hence it is used for joists. Spinning wheels are made from the timber got from walnut, bird-cherry etc. Walnut timber is also used for making furniture, gunstocks and ploughs. Maple wood timber is also used for making ploughs.

It is very often said that in Kashmir during winter 'fire pot' is first and 'food pot' is next. It means that fuel for heating the houses is required on a large scale in higher areas of the state. Excellent type of fuel is obtained from birch, alder and pine. After obtaining timber etc., rest of the wood is used for fuel in Kashmir. Mulberry trees are now extensively used for sericultute, though the wood is used for sports goods, boat making and door beams too.

Soils

The fertility of the mother earth, preserved and replenished in soil, sustains the human race. Soil preservation has become a prior concern of every country in the world. Howsoever affluent the nations may become by way of industrial revolutions but food, the basic most requirement of the human being has to be purchased or produced. Many nations import large quantities of food and the soil fertility in food producing countries indirectly affects the food importing countries. Kashmir the heaven on the earth is known for its paddy, saffron, orchards and stately trees, all grown on soils. Thus, the study of soils as found in the state of Jammu and Kashmir assumes a great significance.

The soil at a place depends upon the underlying rocks, organic matter, geomorphic processes and human interference. In Kashmir the soils have mostly been the results of geomorphic processes, climatic conditions, vegetal cover and geo-lithology. As in the case of all other mountainous states the soils found in this state are varied. Altitude, vegetation cover, slope and aspect have affected not only the climate but soils also. In the higher areas the glacial action of the past and present have greatly influenced the soils. In general in the foot-hills vast deposits of gravel and coarse sand are found. In areas of high altitude immature and thin veneers of soil are only found. The low temperature results in lower weathering and thus very little original matter is obtained. The physico-chemical and biological processes are at the lower ebb because of shorter growing period. Only on terraces the fluvio-glacial soils are located. In areas affected by glaciation the boulder clay and outwash soils are met with. In tropical forests though the soils are leached yet they are rich in humus. Acidic and podzol soils have developed in areas covered with pine and other coniferous forests. Peaty soils have developed in swamps and marshes.

The soils found in Gilgit, Ladakh, Tribal Territory, Chilas and Gilgit Wazarat are thin, immature and of little economic significance. Moreover much of this area is at present under the illegal occupation of Pakistan and forceful occupation of China. The data

is not available and nothing new can be said about the soils found in these areas. However, the soils found in Jammu region and Kashmir valley are of economic significance and deserve a special treatment.

In the Outer hills and Outer plain coarse sand, gravel, boulders and ferruginous clay are the underlying rocks. But the overlying cover is of alluvial soils which vary in content from sandy loam to loam. Clay content is little. Poor in lime and nitrogenous content, these soils abound in phosphates, potash and magnesia. According to recent soil surveys conducted a wide spread tendency towards acidity has been detected. Green manuring, legume plant cultivation and liming of soils have been advocated as the measures to enrich these soils by soil scientists.

Dr. A. N. Raina has made an intensive study of the soils found in Kashmir basin. The valley bottoms are covered with thick alluvial soils rich in organic matter and nitrogen content. He recognises the following eight soils types in this basin:

(i) *Gurti* (Silt) is the richest soil of the region. Rich in clay, organic matter and nitrogen this alluvial soil is the result of river floods. Its moist content is quite high and thus can withstand scanty rainfall. River Jhelum and its tributaries are liable to almost annual floods. The matter brought by these streams is deposited in the flooded area. Being renewed every year the *Gurti* soils need no heavy manuring. During floods this type of soil settles in Verinag, Doru, Achabal, Anantnag, Pampore, Bandipur, Sopore, Shopyan, Kulgam, Pulwama, Baramulla, Badgam and Sumbal.

(ii) *Bahil* (Loam) is the second important and prized soil of the Kashmir valley. Rich in loam contents, it gives a light black colour when dry. All the paddy growing areas of the valley have this type of soil. This fertile soil needs very little manuring and overdosing of fertilizers causes much harm to this soil.

(iii) *Sekil* (Sandy) soil with light loamy and sandy contents yields fair results when properly watered. This paddy growing soil is quite common to the north-west of proper Vale where the Sindhu flows in a deep bed.

(iv) *Surzamin* (Vegetable Soil) : The soils best suited for market garden crops and especially the vegetables are called as *Surzamin* in Kashmir. The vegetable growers collect the night soil of the cities, rotten vegetables, fruit etc. and stuff the same into their nurseries. These help in the

growth of rich vegetable growth. Such market gardens with *Surzamin* soil are wide spread along the waterways of the valley.

(v) *Lemb* : The land that carries springs and lakes is termed as *Lemb* in local dialect. This soil found at the lake bottoms made of stiff clay turns into cakes on being dried. It is not of much use for agriculture.

(vi) *Floating garden soils*: Resembling the *Chinampas* of ancient Mexico, there are many floating market gardens in Dal Lake, called as *rad* in Kashmir. On floating rafts in the lake reeds, clay and grass beds are placed. Every thing required for plant growth is provided in the amalgam spread on the rad. These rads grow rich crops of cabbage, turnip, carrot, radish, brinjal, musk, green pepper, knolkhol, water melon, tomato and some other vegetables.

(vii) *Karewa Soils* : Poor for cultivation the *Karewa* soils covering almost half of the valley are permeable soils. Containing loam and loamy clay with coarse brown sand the Karewas harden with increasing depth. With little moisture retaining content, poor in nitrogen content and organic matter these soils solely depend upon rainfall. Because of these facts the Karewas are termed as 'un-cultivable dry table lands of Kashmir'.

(viii) *Nambal* (Peaty) Soils : Friable peaty soils of *Nambal* develop in the marshes and swamps of the Kashmir valley. Though contain little lime yet these are not wholly infertile soils. These are suited for paddy cultivation. The delta formed by the Jhelum and its tributaries in the Wular Lake is the largest tract of *Nambal* soils. The lakes of Hokarsar, Mirgund, Nowgam, Haigam etc. all contain such soils.

The soils in Kashmir are worshipped as miracle of divinity. A peasant in Kashmir is very much particular about soil. He does his best to replenish the fertility of the soils. Green manuring, night soils, chemical fertilizers etc. are being increasingly used to enrich the soils. Since valley of Kashmir is sufficiently rich in lime, the soil scientists do not recommend the application of bone manure.

CHAPTER
3

Agricultural Economy

Agriculture is the mainstay of the people in Jammu and Kashmir engaging 65% (64·78% according to 1971 Census) of the total working force. The other measure to prove this fact is the rural bias of the state's population. According to 1971 census 81·41% of the people lived in villages. Those living in villages mainly depend upon agriculture and other primary economic activities (forestry, fishing, hunting, mining, animal husbandry etc.) for their livelihood. All the primary economic activities put together engage about 72% of the total labour force. The harsh physical environment restricts the cultivated area. The table on next page shows the land use in the state in the year 1973-74 and the changes occurred during the last half decade.

Only 28·5% of the total area is put to cultivation. Because of the limitation posed by the physical environment it is nearly impossible to effect appreciable increase in the net cultivated area. The increase so far obtained can be guessed from the fact that nearly a decade and a half ago (1959) only 28·3% of the total area (as against 28·5% at present) was put to cultivation. Even this small proportion of agricultural land is very unevenly distributed. In Ladakh only 0·1% to 0·2% of the total land is put to cultivation

whereas in Kashmir valley and Jammu foot-hill plain 23% and 31% of the total area is respectively put to plough. A basic feature of the agriculture is that 9·2% of its total area is put to agriculture more than once. Most of the double cropped area is located in the outer hill and foot-hill zone as northwards the intensity of snowfall and consequent short growing period limit the practice of cultivation to one crop only. Only about 4·7 per cent of the total land is termed as fallow land. With increasing irrigation facilities total cultivated area can be increased at the cost of this land. About 44 per cent of the net area sown gets irrigation.

Description	1968-69	1972-73 (*Lakh Acres*)	1973-74	% *age to total area in* 1973-74
1. Area according to village papers.	59·77	59·67	59·67	
2. Forests	16·53	16·47	16·43	27·5
3. Not available for cultivation	13·83	13·94	13·29	22·4
4. Other uncultivated land excluding fallow land	9·72	9·41	10·09	16·9
5. Fallow lands	2·25	2·86	2·83	4·7
6. Net area sown	17·44	16·99	17·03	28·5
7. Area sown more than once	4·24	5·02	5·53	9·2
8. Total cropped area	21·68	22·01	22·56	37·7

NOTE:—*One hectare=2·471 acres.*

Agriculture alone contributes about 36 per cent to the state's revenues while 17 per cent and 9 per cent of the total state income is respectively received from forestry and animal husbandry. About 90 per cent of the net cultivated area is given to foodcrops yet Jammu and Kashmir state experiences 15 per cent food shor-

tage. This is mainly due to lower yields. The average farm holding in the state comes to about 1·5 hectare only meaning thereby that there is heavy pressure on the land. On the other hand the ratio of arable land per agricultural worker is merely 0·6 hectares. On the hill slopes people have carved out terraced fields with utmost pain and labour. These terraced farms are sometimes so small that agricultural operations have to be carried out by human hands and hoe. The disparity in agricultural land use, farm practices and cropping patterns is the result of climatic conditions, uneven distribution of irrigation facilities and nature of the terrain. Showfall restricts the agricultural practices to eight months only in the valley. Higher still agriculture is possible only during short summer season. The Jammu tract because of year long growing season and adequate rainfall grows two crops a year although only about 15 per cent of its total cultivated area receives irrigation as against 60 per cent in the valley and 99·9 per cent in Ladakh tract. Like rest of our country there is a dominance of food crops in the agriculture of Jammu and Kashmir. In fact the agriculture needs diversification and supplementation by subsidiary activities to create more jobs for disguised uenemployed agricultural workers as well as to raise the farm production.

Rice

Rice is the staple and major food crop of the state of Jammu and Kashmir. Out of a total acreage of 19·88 lakh acres (2·16 lakh hectares) devoted to all the food crops 5·88 lakh acres (2·352 lakh hectares) was devoted to rice cultivation in 1974-75. And out of 7·51 lakh acres (3·04 lakh hectares) of irrigated area devoted to food crops 5·41 lakh acres (2·16 lakh hectares) was given to rice alone.

Paddy which is known as *Dhan* in Dogri and other Pahari dialects is known as *Dhanya* or *Shali* in Kashmiri. Requiring high temperatures, higher amount of water, alluvial soils and plenty of labour paddy is cultivated in Kashmir valley and other alluvial tracts during summer. About 75 per cent of the total rice acreage is found in the Kashmir valley. In acreage and production the district of Anantnag leads whereas the second and third positions are also taken by the valley districts of Barmullla and Srinagar. The cultivation of paddy in the valley goes as back as history of civilization itself. This grain has assumed so much significance that there is hardly any function, celebration or ritual in which rice in cooked or uncooked form is not used. About fifty varieties of paddy have been grown in the state though now trend is mostly in favour of high yielding varieties. In Kashmir paddy cultivation is carried on

even at an altitude of 2,500 metres above sea level. Broadcasting as well as nursery plantation methods have been employed for paddy cultivation. In broadcasting method thinning, weeding and hoeing are essential. This increases the labour requirement. Moreover the yields obtained are lower than the transplanted paddy. Hence now more and more paddy is being grown through transplantation.

In the Jammu tract paddy is grown in the alluvial areas where irrigation is also possible. Lower slopes of the Chenab at Udhampur, Kishtwar, Riasi, Bhadarwah and Kathua are the important rice growing areas of Jammu region. But all these areas produce coarser varieties of rice. The Ranbir Singh Pura tract more commonly known as *Nawan Shahr* area produces the finest type of rice in the entire state. The *basmati* type of rice grown here is as good as the basmati of Mukerian in Punjab or Dehradun in Uttar Pradesh or Patna in Bihar. Small quantity of rice is also grown in the districts of Rajouri and Poonch. Now with the availability of irrigation facilities in Jaurian-Khaur tract of Akhnoor a good amount of rice is also being raised there. But Kashmir valley is the ideal place for rice cultivation and it is in the valley itself where rice yields can be considerably raised through experimentation and research. During the year 1974-75 high yielding varieties of paddy were grown over an acreage of about 412·5 thousand acres (165 thousand hectares). The average yield of rice amounted to about 19·16 quintals per hectare. The total state production of rice during the same year was 45·60 lakh quintals.

Wheat

Wheat though not an important crop of the state yet its use as a food is increasing in the state. In fact with modern way of life more and more people are showing a trend towards wheat consumption at the cost of maize and bajra. Hence the acreage under wheat is showing a steady rise. The wheat crop covered an acreage of about 4·65 lakh acres (1·86 lakh hectares) in 1968-69 and acreage rose to about 4·76 lakh acres (1·904 lakh hectares) in 1974-75.

Wheat requires mild temperatures, lesser amount of water and sandy loam or fertile soils. The crop takes a longer period for maturity though quick maturing varieties are being grown in many parts of the world. Wheat is almost entirely a crop of Jammu province where the districts of Kathua, Udhampur, Poonch and Jammu are significant producers. In Kashmir valley wheat is grown only on those elevated parts where irrigation is not possible. Red wheat variety with a small and hard grain is grown in the state. About 1·07 lakh acres (0·43 lakh hectares) of wheat acreage

is provided with irrigation facilities. The state produced about 19·31 lakh quintals of wheat in the year 1974-75. The average yield of this crop during the same year was 10·19 quintals. High yielding variety of wheat was grown on an acreage of about 310 thousand acres i.e. 124 thousand hectares.

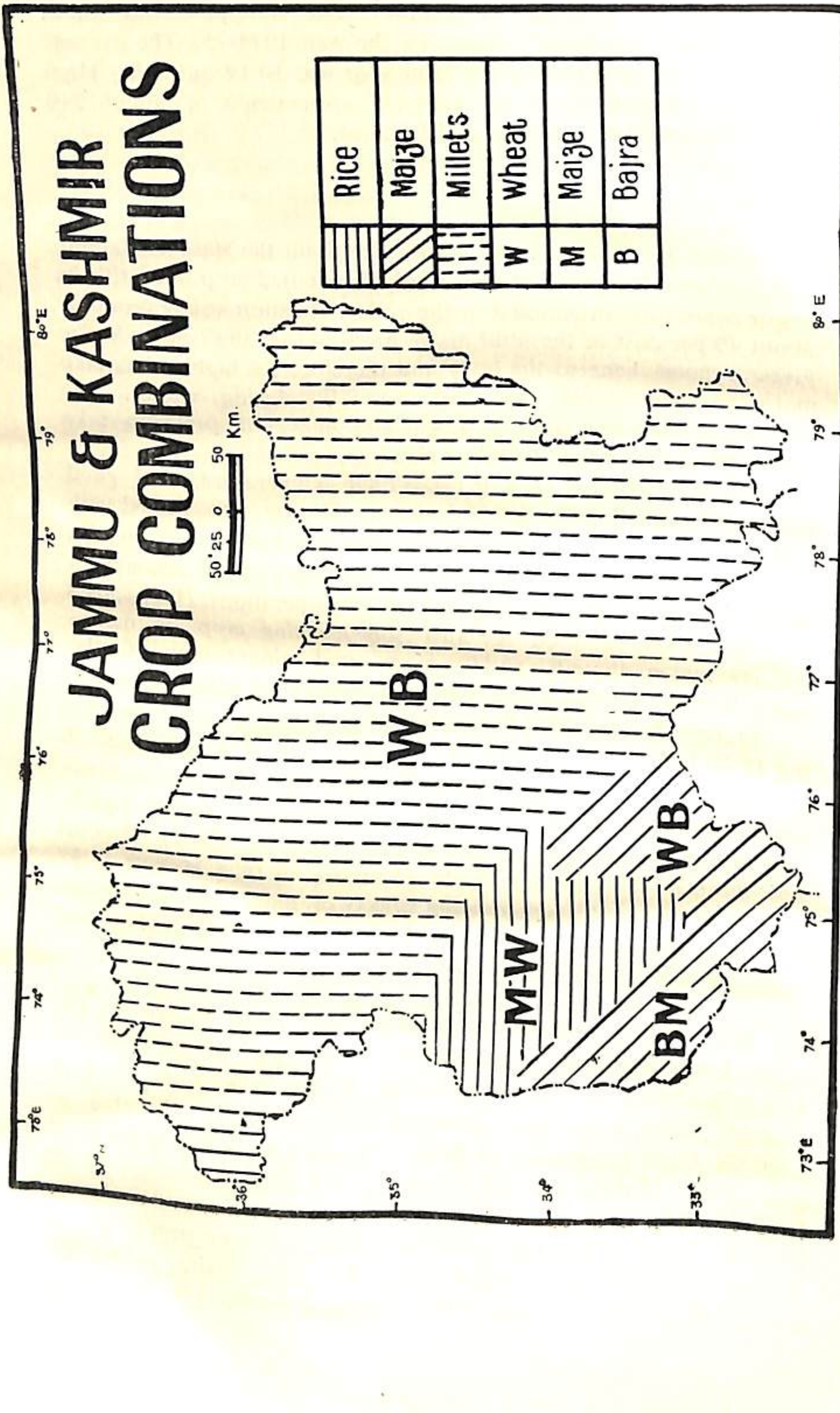
Maize

Maize is an important crop thoughout the state of Jammu and Kashmir. It is more or less evenly distributed crop but still its major concentration is noted in the valley. Kashmir valley produces about 40 per cent of the total maize produced in the state. Maize gives a good heat to the body and therefore the highlanders take maize as their staple food and especially during winter. The roaming graziers like *Gujjars*, *Gaddis* and *Bakarwals* prefer to take maize bread than wheat bread or rice.

Maize is a Kharif crop. It needs high temperatures and good amount of rainfall with a good drainage. During this period with high temperature and high humidity grass and weeds etc. show a luxuriant growth in the maize fields. Therefore a good amount of labour is required for thinning and weeding operations. Heavy doses of manures are required for this soil exacting crop. In mountainous region though paddy is a predominant crop of the valley bottoms yet maize is a dominant crop of the valley slopes.

During the year 1974-75 maize was grown on an area measuring 16·50 lakh acres i.e. 6·60 lakh hectares. On this acreage 30·36 lakh quintals of maize were raised. The district of Baramulla alone produced about 21 per cent of the total production. Other significant producting districts are Udhampur, Anantnag, Doda, Rajouri and Poonch. The average yield of maize in 1974-75 was 11·37 quintals per hectare. High yielding variety of maze was grown on an acreage maesuring 20 thousand hectares or about 49·22 thousand acres.

Bajra, *Barley* and *Millets* are other food crops grown in the state. Jowar had been grown earlier in some parts of the state but now it is almost an insignificant crop. Barley is a staple food in Ladakh. *Grim*, a beardless variety of barley is mainly cultivated in Ladakh. Grim is turned into *Sattu* or brewed into *Chhang* for local use. About 36 thousand acres (about 14·4 thousand hectares) of land is under this crop. The heaviest concentration of barley is, however, found in the Jammu region where still some people prefer to take a mixed bread of wheat and barley flour. Bajra covers an acreage of 42 thousand acres (16·8 thousand hectares) in the entire


JAMMU & KASHMIR
CROP COMBINATIONS
50 25 0 50 Km.
Rice
Maize
Millets
W Wheat
M Maize
B Bajra
WB
M-W
WB
BM
80°E
79°
78°
77°
76°
75°
74°
73°E
36°
35°
34°
33°

state. Bajra is a crop of comparatively dry hilly tracts of the Jammu region.

Oil seeds have been cultivated in the state since very old times. In good old days when kerosene oil was not in vogue people used to burn mustard oil in earthen lamps to light their dwellings during night time. To meet its own needs the government in those days accepted land revenue in the form of oil also. Mustard, rape and linseed are the important oilseeds grown in the state. About 2·88 lakh quintals of oilseeds were raised on an acreage of about 95 thousands acres or about 38 thousands hectares. The oilseeds though grown all over the Jammu region yet cover a significant acreage in the higher altitudes of outer plain where alluvial tracts of land are given to oil seed farming. Among the *pulses* gram, green gram (*mung*), black gram (*urad*) and brown gram (*moth*) are grown. In the year 1974-75 about 3.18 lakh quintal pulses were raised in the state. Gram alone accounted for 0·17 lakh quintals and the entire production was raised in the Jammu tract. Pulses covered an acreage of about 1·29 lakh acres or about 50 thousand hectares. *Cotton, tobacco, sugarcane, chillies, hemp* (*san*) and *potatoes* are also grown in some parts of the state. Cotton, tobacco, sugarcane and hemp are the crops of Jammu region alone. Potatoes almost in equal quantities are grown in the valley as well as Jammu region. Chillies dominate in the Kashmir valley though small quantities are also grown in Jammu tract.

Razmah or delicious beans are grown throughout Jammu and Kashmir. The Bhadarwah *Razmah*, however, has its name throughout northern India.

Saffron

Saffron is the drient carpellary portion of the flower of *Crocus Sativus*, the best known commercial specie of the family of *Iridaceae*. Saffron (*Kesar*) is reputed for its medicinal properties and is a cure against cold and coughs. As a food flavouring substance it is prized gift of the nature. In the valley of Kashmir it has been a legendary crop on the well drained Karewa plateau of Pampore. The recorded account of saffron cultivation on this plateau dates back to A.D. 550.

Saffron is an important commercial rabi crop of Kashmir. It needs well drained loamy soils. Adequate moisture during spring, moderate showers in later summer and a bright, cool and dry flowering season in autumn, constitute an ideal environment for

saffron cultivation. Because of the physical environment required of a particular type, saffron cultivation is limited to flat topped Karewa of alluvial or lacustrine soil of Pampore plateau. The entire process of saffron growing, harvesting, picking and drying is done in Pampore, which was known as Padampur in ancient times.

India is the second largest producer of saffron in the world after Spain. Other significant producers in the world are Italy and France. The entire Indian production comes from Kashmir valley where too Pampore plateau has almost monopoly in this field. Shahi *Zafron* the best quality of saffron is mostly raised here. The average per acre yield comes to about 250 grams. In the year 1974-75 the state produced about 56 quintals of saffron. Since it is used in many religious ceremonies, food flavouring, food colouring and in medicines the entire production is consumed inside the country. About 2050 hectares (about 5065 acres) of land is given to saffron cultivation in the valley of Kashmir. Some quantity of saffron is also raised around Kishtwar.

Vegetables

In the state vegetables like cabbage, cauliflower, knolkhol, pumpkin, brinjals, ladyfingers, spinach, onion, tomato, carrot, turnips, radish, sugar beet, cucumber etc., are grown in many parts of the state. Market gardening has emerged up around almost all towns of the state. In Kashmir valley the farmers grow vegetables with such pains that it is often recommended to farmers elsewhere to emulate the Kashmiri vegetable grower. The spread of irrigation has made it possible to increase the acreage under vegetable cultivation and this way use is being made of every inch of land. Now vegetable seeds are also being raised though occasionally it is at the cost of cereal cultivation. In Ladakh, however, four seed multiplication centres have been started at Kargil, Nubra, Murtse and Ranbirpura so that the farmer can be apprised to better his lot through his vocation.

Horticulture

Kashmir has been a fruit growing region from ancient times. It is often said the Vale enjoys a continental type of temperate climate but when viewed minutely it is found that the climate is modified type of Mediterranean climate. Mediterranean type of climate is renowned the world over for the cultivation of fruits. And today we find that the state of Jammu and Kashmir is the largest producer of temperate fruits in India. With the introduction

of European varieties and scientific techniques the production of fruits has risen manyfold. As already seen physiographically and climatically the state falls into three units of Jammu tract, Kashmir valley and Ladakh. Because of varying natural environment fruits grown also differ from tract to tract. In Ladakh region grapes, apricots, apples and walnuts are grown. The Jammu tract grows mangoes, bananas, tapioca and oranges. Vale of Kashmir is infact the fruit region or orchard belt of the state. Apples, cherries, plums, peaches, pears, apricots, pomegranates, walnuts and almonds are grown in the valley. Consequent upon the initiation of agricultural development the diversification of agriculture has resulted in the conversion of large tracts of non irrigated lands into fruit orchards. The current acreage under the orchards comes to about 70 thousand hectares. During the year 1975-76 the fruit production has risen to about 2·75 lakh tonnes out of which about 2 lakh tonnes were exported to other parts of the country and abroad as well. The state has provided a Cold storage at Delhi with a cost of Rs. 60 lakhs. This measure has boosted the export of fruits and especially apple from the state. Plans are being thoroughly considered to export apple to oil rich Middle Eastern countries so as to earn petro-dollars for the nation. An integrated horticulture development is also likely to be initiated with the World Bank help.

Bee Culture

Floral gaiety is nature's wonderful gift to Kashmir valley. The floral vegetation provides a vast source of required food for honey bees. This prodigality of nature in endowing varied floral wealth has inspired many people since ages to accept bee culture as an avocation as well as profession. The bees collect the sweet viscid fluid from the nectaries of flowers and store the same as honey in their nests. Possessing an immense food and medicinal value honey is the only unmanufactured sweet. The Kashmir honey is renowned all over the country for its quality, light colour and mild pleasant flavour. *Apis Indica* or hill variety of Indian bee abounds in Kashmir. This bee is reared in about 3000 modern beehives and 400 wall colonies. About 300 regular bee-keepers produce nearly 400 quintals of honey valued at about 40 lakh rupees. This much quantity of 'extracted honey' is obtained from beehives alone. An equal quantity of 'squeezed honey' is also obtained from the wall colonies. The state exports about 600 quintals of honey during the year of good production.

The honey contains about 40 per cent fructose i.e., fruit sugar,

34 per cent glucose or dextrose i.e. grape sugar and 2 per cent surcose i.e. cane sugar. Organic acids, proteins and mineral salts are other ingredients found in honey. Of the thirteen different mineral salts, iron, calcium, magnesium and manganese are the important ones. Besides, volatile oils are also found in honey. Honey is a rich energy imparting food and forms a perfect food with milk. Levalose or fructose and glucose found in honey are readily acceptable by our blood streams and thus provide immediate source of energy for human body. The Ayurvedic and Unani systems of treatment recommend the use of honey as laxative, blood purifier, preventive against colds, coughs, fevers and curative for eye sores, ulcers and sore throats. Kashmir is lucky in possessing and exporting such a food item to other parts of the country. The Agriculture department of the state provides essential technical know how, guidance and finances to the bee-keepers so that the production of this nectar like food reaches new heights.

Animal husbandry and sheep breeding

Livestock assumes a great importance in an agricultural economy and especially in a traditional one. Livestock provide milk, meat, milk products, draft services, hides and skins. In a mountainous state like Jammu and Kashmir where because of topographic reasons the use of modern farm machines is limited the agricultural operations entirely depend upon the muscles of animals and men. Besides, the animals also serve as beasts of burden in undulating hilly areas. So much so that even goats and sheep carry loads across the snowy and lofty passes. The type of animals being reared, however, depends upon the nature of terrain and climatic conditions. In the outer plain or Jammu tract the buffaloes, cows, bullocks and goats predominate. Buffalo being a bulky animal decreases in number with the increase in altitude. Horses, mules and donkeys are also reared in this tract which serve as beasts of burden. This tract with hot wet monsoon season and dry winter season is naturally a good habitat for animals. Because of this reason about 60 per cent of the animals of the entire state are found in the districts of Jammu, Kathua, Udhampur, Doda and Rajouri. In these districts also the number of sheep and goats increases in middle Himalayan region.

In the Vale of Kashmir sheep, goat and cow dominate the scene. Since the mountainous topography limits the size of cultivable tract, it is difficult to spare cultivable land for fodder crops. Hence the livestock mainly depend upon the mountain meadows. During summers the graziers move to higher meadows along with

their animals. The mountain glades of Toshmaidan and Sondipur-Dragar become crowded during summers but are deserted during harsh winters. This practice of moving livestock to hills and valleys during alternate seasons is called transhumance. With increase in elevation the importance of animals enhances and beyond 2,500 metre contour the economy of the graziers depends entirely on livestock.

The remoter parts of the state i.e., Ladakh is known for its yaks, zomoes and goats. This is a semi Arctic zone and it is almost impossible to bring up cattle like cows, bullocks and buffaloes. Yak is the age old animal of Ladakh. Yak besides providing its services as a beast of burden also provides meat, hides and skins to the local populace. Zoe a cross breed between a Yak and a cow has also been introduced in this tract. Zoe works as a draft animal here whereas Zomoes the she-Zoes provide milk. Zoe is a drought resisting animal *par excellence*.

The livestock and poultry census are conducted after every five year. The latest such census was taken in 1972. The same is as under :

Sr. No.	*District*	*Livestock (lakhs)*	*Poultry (lakhs)*
1.	Srinagar	3·777	3·38
2.	Anantnag	7·180	4·52
3.	Baramullah	5·951	4·60
4.	Ladakh	2·199	0·18
5.	Jammu	5·694	1·00
6.	Doda	4·462	0·75
7.	Udhampur	5·700	0·66
8.	Poonch/Rajouri	1·193	1·09
9.	Kathua	3·876	0·36
	Total	42·847	16·54

The Gujjars, Gaddis and Bakarwals are the traditional live-stock herders of Jammu and Kashmir. Gujjars are mostly nomadic herders who move with their buffaloes from place to place. They mostly confine themselves to the Jammu tract but very often cross to the neighbouring states of Punjab and Haryana. They go to the hilly pastures during summers and return to plain areas in winter. Gaddis in a similar way move to Himachal Pradesh in search of fodder for their sheep and goat. Gaddis are not numerous in this State. Long ago some families of Gaddis moved from the Chamba State and the present Gaddis in the state are their progeny. The Bakarwals mostly rear goat for milk and meat.

In spite of the fact that State has a rich animal wealth the milk supply in the state is poorer because of lower yields. However, the plans and projects to develop dairy farming and to improve upon the breeds of the animals are in progress.

Poultry Farming

The latest poultry census reveals that there were about 16·54 lakhs poultry birds in the state. Since ages the farmers have been keeping fowls and hens for earning extra income. With little investment the poultry birds give a good chunk of side income to the farmers. The poultry products also add to the nutrients of diets. Now under the planned progress government has also started poultry farms at many centres. Poultry Production-cum-Marketing centres have been established both at Jammu and Srinagar. These centres impart guidance and help to other sixty poultry farms located in different parts of the state. Duck farming is quite popular in the valley area. With the technical know how of Hungarian experts exotic birds are being introduced so that duck farming can be placed on a sound scientific footing.

Sericulture

Sericulture or silk rearing is an old household industry of Kashmir. The districts of Anantnag, Srinagar, Baramullah, Doda, Udhampur and Jammu are significant producers of raw silk in the state. The silk worms are reared on the mulberry leaves. The area lying west of the Wular lake is quite rich in mulberry trees. Based on the local raw silk there are two silk industries located in Jammu and Srinagar. There are also a number of subsidiary silk industries. About 600 quintals of raw silk is produced in the silk industries. Georgette, parachute and suitings are the different silk fabrics pro-

duced in these silk industries. About three lakh metres of silk fabrics are prepared in the silk factory of Srinagar alone.

The state of Jammu and Kashmir is not a self sufficient province as far as the food crops are concerned. The harsh climatic conditions and the disturbances created on the border areas by our neighbours have been adversely affecting the agricultural development of the state. Moreover the foodgrains made available to the people at much subsidized rates have been working as disincentives. Unless the peasants and other consumers feel the pinch of the reality there is not going to be much improvement in this field. No doubt it is the responsibility of the government to provide better and high yielding varieties of seeds, scientific know how and better agricultural implements yet it is the peasant behind the plough who can work wonders with his tireless efforts and determination. It is high time that the farmer of the state rises to the occasion and spares no efforts to bring about agricultural affluence in the state. Too keep himself busy throughout and also to subsidise his income the farmer can perform many side jobs. The government should also give a serious thought of starting a farm varsity and emulate the steps taken by agricultural universities in other parts of the country.

CHAPTER

4

Mineral and Power Resources

For its salubrious and invigorating climate, snow clad hoary headed mountains, panoramic and charming scenery and age old culture Kashmir is known in every nook and corner of the world. Like many other mountainous parts of the world these mountains too have varied mineral wealth sufficient for bringing about a phased programme of industrialization in this state. But it is quite strange that before its merger with India no systematic, scientific and sustained efforts were pursued to locate the mineral wealth. Lawrence was of the opinion about a century ago that the chance discovery of sapphires in the Padar tract in 1882 led one to the hope that other sources of mineral wealth would also be found. He further opined that the native people were not at all enthusiast in this field and did not want the mineral wealth to be exploited. Giving a reason for such a negative attitude Lawrence says, "The people are engaged in agricultural pursuits, and their experience in the past teaches them that the discovery of mineral wealth is attended with drawbacks in the shape of forced labour and the presence of a large number of officials who have to be fed." This seems true in an area where in medieval times the king Zain-ul-Ab-ul-Din met all his private expenditure from the proceeds of a copper

mine that he discovered in Kashmir. For a sufficiently long time the profession of mining went into oblivion because of many social, economic and political causes.

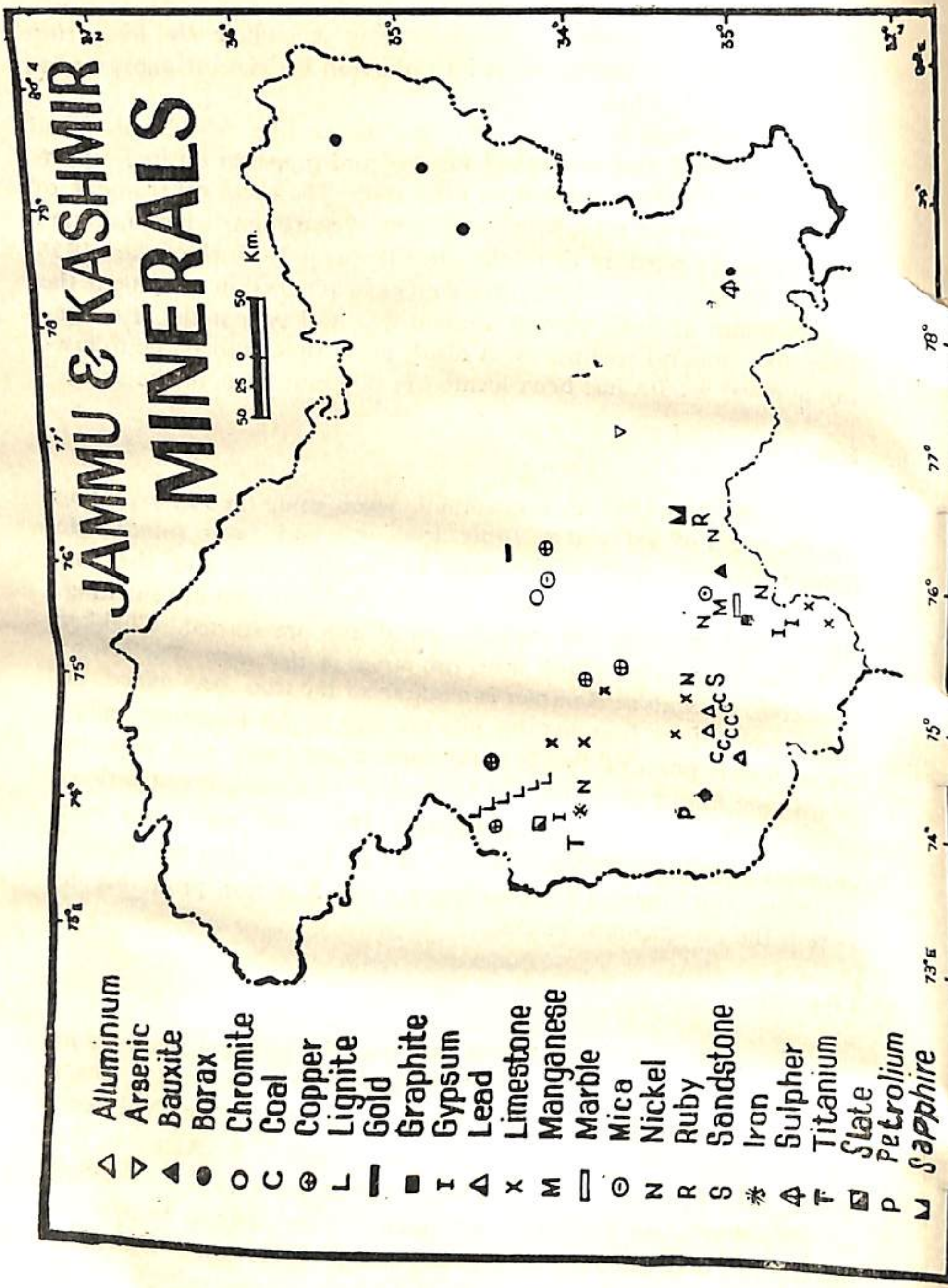
During British regime the geologists like Middlemiss and Wadia carried out geological surveys and prepared outline reports on mineral wealth availability in the state. The then government of the state also set up a Mineral Survey Department which initiated a preliminary work in this field. But it was only in the year 1956 when to strengthen their programmes of planned development the Government of India started a scientific and systematic investigation for mineral wealth. As a result of all these efforts the following mineral wealth has been located in different parts of the state.

Iron Ore

In the year 1892 an Englishman spent some time in exploring the resources of Sof where some iron ore had been found. He opined that the supply of the area was inexhaustible and the surrounding pine forests would provide fuel for iron ore smelting. Slowly and gradually the exploitation of iron ore started. Chakkar and Salal are two good iron ore mines of the state. The bridge over river Chenab at Ramban is made from the iron ore mined at these two mines. Innumerable pits are seen in this limestone region where forests provided fuel for furnaces. Some fairly rich deposits of iron ore have been found but the lack of systematic investigations hindered the commercial exploitation. Iron ores with lower iron contents have been located at Khandali and Matab (Jammu region) and Quni and Khrew (Kashmir region) but it is not profitable to exploit the same commercially.

Limestone

Limestone has been mined and used for building purposes in the state since ancient times. Martand temple near Anantnag bears testimony to this fact. The lime mountain or *Ahak Tang* had been the chief source of limestone. The lime extracted at Ajas on the Walur lake used to be burnt at Biru. Limestone was also extracted on the shores of Dal lake and banks of the Jhelum. In most of the Karewa deposits *Kankar* is found which makes good hydraulic lime. *Sipar* an excellent type of chalk, similar to the tailor's chalk was formerly mined from Karewas near Srinagar. It was used mainly for wall plasters and for writing on slates. Limestone, if on the whole viewed is found practically all over the region, but Khrew Khunmuh (Kashmir) and Bhasoli (Jammu) are the two important


JAMMU & KASHMIR
MINERALS
50 25 0 50 Km.
Alluminium
Arsenic
Bauxite
Borax
Chromite
Coal
Copper
Lignite
Gold
Graphite
Gypsum
Lead
Limestone
Manganese
Marble
Mica
Nickel
Ruby
Sandstone
Iron
Sulpher
Titanium
Slate
Petrolium
Sapphire

mines of present times. Limestone has also been located at Manasbal, Anantnag, Achabal, Verinag, Bandipur (Kashmir), Kalakot, Balawan (Jammu) and Sarpul (Ladakh). The deposits of Wayan (Kashmir valley) are already being worked for the local cement factory.

Gypsum

Gypsum used for reclaiming the *Kallar* affected land and for making plaster of paris is known as *Gach* to Kashmiris. It is obtained in good quantities from a place below Baramulla and Lime mountains overlooking Manasbal lake. Extensive deposits have also been found in Doda and Udhampur districts. Ramban, Batote and Assar are the chief centres of gypsum extraction.

Copper

Copper ores consist of carbonates, oxides and sulphides. Copper was once obtained from the mountain on which Aishmakam in Liddar valley stands. Sumhar area of Anantnag district, Kangan area in the Sind near Ganderbal, Lashteal hill spurs in Baramula district and Jangalgali in Chenab valley are the present copper bearing areas. Investigations for locating copper in many other parts of the state are in progress.

Gold

Gold found in quartz veins gets liberated because of gemorphic processes carried on by wind, water and chemical action. Particles of gold get mixed in the river sands and are termed as alluvial or placer gold. In the Kargil area sporadic gold placers have been found at times. Even some platinum has been traced in some of the placer gold washings. According to investigations carried out by the State Geological and Mining department traces of alluvial gold have been found at about half a dozen places along the Indus, the Dras and Saru rivers in Ladakh. A detailed plan is being formulated to undertake intensive investigations along the terraces of these rivers to assess the presence of alluvial gold.

Bauxite

Bauxite reserves of about 15 million tonnes have been located in Riasi and Poonch areas. Widespread in Jammu region the bauxite ore was first mined in 1919. The Chakkar area of Riasi with rich deposits at Sangarmarak, Panhasa, Sala, Jangalgali and

Sukhwalgali is the leading bauxite tract of the region. About 40 to 45 thousand tons of bauxite ore is mined these days annually.

Sulphur

There are many sulphur springs in the Kashmir valley. Those at Wean, Islamabad, Sadarkat etc., have been known since ancient times. But at present sulphur in the form of Borax is obtained from Pugga valley in Ladakh, though some occurrences are believed to be located in the north eastern territory of Ladakh.

Slate

Slates are quarried near Baramula though in past these were mined at Brain on the shores of Dal lake also. Known as *Sang-i-farash* the Baramula slates are used for bathroom and toilet floors in the valley.

Clays

The state is quite rich in a variety of clays most suitable for potters' purposes. Ceramic clay has also been found in southern Kashmir. In Jammu region vast deposits of China clay are spread but workable deposits have been dotted at Chekkar Tekri and Salal near Jangalgali. The rural inhabitants of Jammu region use this clay (*parola*) extensively for white-washing purposes.

Quartz

Quartz is used as a building stone. Padar area is quite known for its quartz occurrences. Sonmarg and Karnah areas also contain quartz deposits.

Ochre

This red and yellow powdery substance is used for door and wall decorations. It is also used in paints, plasters and colours. Nur Khwah, Ratasar and Jhaggi tracts of Uri area contain large deposits of ochre.

Lead and Nickel

Lead is found at Buniyar near Baramula. Recently the deposits have also been traced at Nigote in Udhampur district. Nickel has

been located in the vicinity of Ramsu near Ramban. Some deposits have also been found near Kishtwar and Bhadarwah.

Abrasives

The polishing material in the shape of shale has been found at Khunmuh near Srinagar. Its demand is progressively increasing since it is being used in marble and cement floorings too besides in polishing metals. If this material is properly processed, no wonder it would replace many of the polishing materials now found in the market.

Rock Crystal and Felspar

Smoky in colour both these products are used for making buttons, ear-rings and ring stones (*nag*). There are also being now used for controlling the waves emitted from broadcasting stations. These are found in Kishtwar area and particularly at Padar.

Many precious and semi precious stones are also found in the state of Jammu and Kashmir. Corundum is found at Padar, gem form of aquamarine and beryl are found at Dras (Ladakh), Dangel, Chishote, Kohan (Padar), Kishtwar and Karnah (Kashmir). Garnet, ruby and sapphires are also found in this region. Arsenic (Lingshot-Ladakh), chromite (Dras-Ladakh), graphite (near Bhadarwah), marble and mica (near Doda), sandstone (near Ramban), mangnesite (Shargol-Ladakh), barytes (near Riasi) etc. etc. are some of the other minerals found in the state. A kind of black sticky material called as *Shilajeet* is obtained from the rocks of higher elevations. It is supposed to be a very good tonic.

A group of geologists has recently pointed towards the existence of a 'ruby mine' near Padar in Jammu. The geologists who have been engaged in mining operations at the sapphire deposits have located the ruby mine at a place nestling in the lofty mountain ranges at an elevation of 4800 metres above sea level. The detailed investigations are being undertaken by the state geological and mining department in this respect. On the other hand a comprehensive plan to step up the sapphire mining operations at Padar is also being formulated. According to this plan two helipads would be constructed in this area so that the helicopters carrying exploitation equipment can safely land here. A majority of the sapphire crystals dug out so far range in length between 2 cms to 2·75 cms. The crystals are highly transparent. Impure varieties of sapphire are used as abrasives in grinding and polishing.

POWER RESOURCES

Power and energy rotate the wheel. Without power the factories, workshops, vehicles would come to a stop. In a state like Kashmir during severe winter the blood circulation often comes to almost a halt in the absence of heating substances. In ancient past fuel wood was the only source of power, but now coal, petroleum, gas, thermal power and water power have made regular inroads in human life.

Coal

To an Englishman Mr. Lydekkar about one and a half centuries ago "some of the Zaskar rocks of the Kashmir valley looked almost coaly in nature". Lawrence saw the blacksmiths of Kashmir using a black substance like fossil peat which they said gave a great heat. Middlemiss a geologist estimated in the present century that Kalakot, Chinpur and Goa Ber Sair areas in Jammu contained about 100 million tons of semi anthracite coal. Now the surveys have established that a 50 km. long belt from Kalakot to Jangalgali contains the reserves of semi-bituminous and semi-anthracite coal to the tune of 160 million tons. Jangalgali, Chinkali, Chakar, Mahogala and Kalakot contain most of the coal reserves. Ladda, Chinkah, Chakan and Mesks are other coal bearing beds in this belt. In the Kashmir valley inferior coal reserves to the tune of 20 million tons have been estimated in Nichahoma area. So far coal is mined only in Kalakot region where two mines are in operation. Coal mining is a state enterprise. A major portion of the coal produced in this region is used for generating thermal electricity.

Lignite

The Karewas of Kashmir which are otherwise unproductive from agricultural point of view contain notable lignite reserves of the state. About 84 million tons of reserves are believed to be located in this region. Lignite is known to have existed here long before. The lignite mining was initiated at Nichahoma-Chowkibal tract. The diggings have gone beyond a depth of 40 metre but the lignite found is of bit poor quality. It contains 25 to 50 per cent ash and 20 to 30 per cent moisture. But it competes favourably well with that of Burma as far as the calorific value is concerned.

Peat is also extracted from the low lying area on both sides of the Jhelum river below Srinagar. Peat is formed of the remains of water plants and is known as *demle tsak* to Kashmiris. Since

time immemorial the rural potters have been using peat. Mixed with wood, peat becomes a cheap and effective fuel for room heating.

Petroleum and Gas

"The oil bearing tectonic axis at Khaur and Dhulian found in the domes of western Pakistan (now Pakistan only) extends also towards Kotli, Nowshehra, Saruinsar and Mansar. The axis extends across the river Ravi into Jawalamukhi area."[1] Preliminary investigations in Ramnagar and Mansar areas have revealed some beds with inflammable gas. Many years ago an oil seepage at Maradpur (near Rajouri) was reported. On field examination it was found to be natural seepage. Oil and Natural Gas Commission is aware of these potential oil and gas bearing areas. In near future the ONGC is planning a drilling in Jawalamukhi area the eastern end of this belt. The results in this tract would very much affect the prospects of Jammu region. Oil and natural gas is likely to be located at Nowshehra, Ramnagar and Dharamthal tracts.

Water-Power

During this century the generation of hydroelectricity has spread like a contagious disease in many parts of the world. The possibility of erecting concrete dams and the ease with which water can be stored in the resultant reservoirs have facilitated the generation of water-power to a greater extent. The water from these artificial water bodies can be taken to the generating sites with little difficulty. Unlike coal, this power can be transmitted to places hundreds of kilometres away through the cables and transmitting lines laid once. Like petroleum and coal it does not emit soot and foul smell. Workers operate in an unpolluted atmosphere. Above all once properly established this source of power is quite cheap. Many works requiring higher engineering skills and continuous supply of power have been put to execution in many parts of the earth after the control over water-power became possible.

In a mountainous state like Jammu and Kashmir also covered with thick forests fuel wood shall continue to be a major source of power for many years to come. Away from the lignite, peat and coal mining areas the wood and cow dung cakes are still used as domestic fuel, though kerosene is burnt in lanterns and lamps. In

1. Raina, A.N., *Geography of Jammu and Kashmir*, NBTI, New Delhi (1971) p. 93.

the beginning of the current century the Anglo-Russian relations became quite strained and the British authorities feared Russian invasion over Kashmir through Afghanistan. The fear alerted the Britishers and they took many steps to strengthen the frontiers of the then India. In this bid they laid the foundations of Mohra water-power generating plant with 4,000 kilowatts capacity in the district of Baramula. Mohra was then situated on the strategic road across the Muree mountains, that linked Srinagar with Rawalpindi. The electricity at this plant was proposed to be generated for defence purposes. But soon the Anglo-Russian relations improved and the hydro-power thus generated was diverted towards domestic consum-ption and some factory installations. This way the Kashmir valley was fortunate in having been counted amongst the first electrified regions of India. With the technological advancement the use of many electrical appliances increased the demand for water-power. On the other hand the tribal raiders switched off the Mohra water-power plant and plunged the entire valley in darkness in October, 1947. It took some time to restore power. With Kashmir's accession to India the demand for power as a result of developmental activities shot up. The 25 cycle electricity generated at Mohra was found wanting. The government had to create new plants to generate water-power and the power produced at Mohra was exclusively earmarked for the flourmills, rice husking mills and silk factory at Srinagar. The 25 cycle machinery in this plant has now been converted to 50 cycle machinery and its generating capacity has been raised to 15,000 kwtts.

In post accession period new water-power as well as thermal power generating plants have been commissioned whereas work on some such plants is in various stages. Sind is an important tributary of the Jhelum. On its bank a power generating plant was construc-ted at Ganderbal. A 13 km. long canal has been built to fetch water to the generating site. The plant generates about 13,000 kwtts. of hydroelectricity. It was with the completion of this plant that the Mohra plant got relief and diverted its consumption exclusively for industrial uses. The 50 cycle machinery of this plant generates water-power for the urban centres of Srinagar and Anantnag. The power is also now being used by the water-pumps augmenting lift irrigation in some parts.

Another plant to harness water-power has been erected at Pahlgam on the bank of Liddar stream, an important tributary of Jhelum. About eight metres high concrete dam creates a waterfall and thereby 200 kwtts of electricity is generated. This power is used for illuminating the tourist huts and running some cottage industries at this tourist resort.

The Upper Sind Project (Plant I and II) which will have an installed capacity of 22,000 kwtts is in progress. Similarly the Lower Jhelum Project is under execution at Baramula.

In the Jammu region a thermal power generator has been commissioned at Kalakot to take benefit of local coal reserves. Its first unit is producing 7500 kwtts of thermal power but ultimately the plant shall produce 22,500 kwtts of thermal power.

In the pre-partition days keeping in view the available and potential facilities many ambitious schemes to generate power were planned. If all went well and these plans were put to practice, these might have supplied ample 'white coal' i.e. hydroelectricity to the entire state as well as surrounding areas of Punjab. One of such plans was Riasi-Chenab scheme prepared by Mr. Savages, a boulder dam expert of his times. It was proposed to be a multi-purpose project which besides generating water-power would have extended the facilities of navigation, fishing, irrigation and soil conservation. But the division of India operated a near gear in this respect.

Keeping in view the plans in hand it is expected that during 1976-77 about 1,03,620 kwtts power would have increased in the existing quota. The Lower Jhelum Hydroelectricity scheme is fast approaching completion and it is expected that its first unit will start functioning in the year 1977. Salal project is being completed by the Union Government and its first unit is expected to operate with effect from March 1981. The Union Government are also planning to take Kishtwar Hydel power project in their hands. Serious thought is also being given to the Uri Hydel Power Project.

Plans were also afoot to generate 1500 kwtts of power at Leh and Kargil in Ladakh but the plans had to be shelved in the wake of unprovoked Chinese aggression of October, 1962. But to meet the exigencies a diesel engine has been installed at Kargil. Small diesel and hydel generators have also been started at Poonch (208 kw), Mendhar (50 kw), Rajouri (100 kw), Banihal (115 kw), Udhampur (640 kw), Ramban (25 kw), Kishtwar (50 kw), and Bhadarwah (150 kw). Among the plans proposed are Jammu (18 kw), Chenani (25 kw), Salal (480 kw) and Thein.

IRRIGATION

The technique of watering the fields, draining out the flooded water and checking the menace of floods and famines is as old as the hills dotting the landscape of Jammu and Kashmir. The *Nilmat Purana* and Kalhana's *Rajatarangini* pay tributes to *Prajapita Kashyapa* for his excellent work of cutting the mountain ring at

Baramula to let the water flow out to lower heights. This way the *Sati Sar* lake was drained out and resultant bottom relief was later on cultivated. This means that the story of reclaiming land and providing water to other areas dates back to the pre-dawn history period. Similarly the legendary records speak of the means that provided water to elevated Karewas like *Damodar-Karewas*. This was no less than the present day technique of lift irrigation. These legendary accounts steadily merge into the history of irrigation in Jammu and Kashmir.

The real credit for initiating irrigation works for the public welfare goes to Suyya the engineer-adviser of king Lalitaditya. In Lalitaditya's times famines and floods ravaged the countryside. In those days there were very crude means for checking floods and there were no infra structure needed for digging wells, excavating canals and erecting dams. For his successful efforts resulting in the prevention of floods Suyya has been called as 'Lord of Food' i.e., *Annapati* in Kashmir. "His study of the confluence of the Vitasta (Jhelum) and the Sindhu (Sind) was so thorough that he regulated the flow of water to these rivers to suit normal irrigation to agricultural land. Judged by any standard, the success of Suyya was a miracle of that age, considering the crude type of facilities available then. Contemporary records also pay a tribute to Suyya's genius. He will be remembered so long as the silt town of Sopore remains on the map of Kashmir."[2]

King Zain-ul-Ab-ul-Din the benevolent ruler of Kashmir pursued a grand programme aimed at the agricultural development of valley. The programme consisted of excavating canals, building bridges, erecting dams and elevating river banks. The joining of waterfalls in dry rivulets leading to streams has made once dry lands as smiling green fields. He had plans to fill the Wular lake and create more land for cultivation but his death torpedoed this welfare scheme. He also got prepared a series of parallel canals to store water on higher elevations so that irrigation facilities could be provided to the Karewas. During the Dogra rule unprecedented floods causing havoc to the Vale were witnessed. To prevent such floods serious thought was given to the programmes like dredging, constructing canals, tree plantations, weir erections and deepening of river channels. Consequently many diversion channels, locally known as *Kuhals* were built. The Suman, the Nandi, the Martand, the Zaingir, the Litapur, the Lal etc., Kuhals were built and modelled to store water for irrigation during this period. Maharaja Ranbir Singh made streneous efforts to improve the agrarian position of the state.

2. *Ibid*, p. 69.

But he had neither the time nor the resources of providing more irrigation facilities. In fact he spent a major part in surveying the land and preparing the land records. However, his successor paid attention towards the irrigation works so that the dream of agrarian prosperity visualised by his predecessor could be led to fruition. He got the Shahgund area (near lake Wular) reclaimed by dredging the channel between Sopore and Khadanyar. The flood-spill channel to Padshahi Bagh and Dudganga, Hokarsar and Naugam Kuhals were successfully completed. The Martand canal was extended and remodelled to make it fit for draining more water. To regulate the water level for the capital town of Srinagar, Chhatabal weir was erected. The Ranbir, the Partap, the Ujh and the Basantpur canals were also built during this period.

The last Dogra ruler Maharaja Hari Singh also showed keen interest for the improvement of agrarian condition. To combat the menaces of floods and famines he followed a vigorous engineering programme under his personal control. Thus bridge and *bunds* were constructed and canal channels were deepened. He got the locks constructed at Gao Kadal and Munshi Bagh so that water level to Srinagar could be kept under control. Lock gates along with new bridges were also provided on the river Jhelum, that flows through the city of Srinagar. Escape channels were provided at Parimpora, Anchar and Hokarsar. Besides giving a new shape to the Zaingir canal the Dadi channel was also remodelled. Maharaja's entire project aimed at flood and famine control could not be completed because of the political upheavals that marked his times.

In the post-merger period steps are being taken to remodel, extend and improve upon the existing canals and channels. Lift irrigation scheme with the help of pumping stations at Aukhul, Dagripura, Barru, Ládura, Litapura and Padgampore has provided irrigation facilities to a large tract lying on the western bank of the river Jhelum. Lift irrigation scheme is also providing water from the Ranbir canal to the area lying between Akhnoor and Chhamb. Once dry and drought infested, this tract now produces large quantities of paddy. The Kathua Feeder Project is yet another feat for improving the lot of farmers. Similarly the Ujh storage works and Pie canals have added to the irrigated area in the state. In the villages located on the Outer Plain and Outer Hill region village tanks have been remodelled to store more water.

The intensity of irrigation is greater in those areas where rainfall is almost negligible. For example 99·9 per cent of the cultivated areas in Ladakh gets irrigation facilities, whereas the Jammu district gets irrigation facilities only for about 5 per cent of its cultivated area. On the whole about 42 per cent of the total net area sown is

watered by means of irrigation.

Now the state is making all efforts to bring more and more area under irrigation facilities. Against a target of 4,22,625 acres (about 1,69,050 hectares) the state has been able to provide irrigation facilities to an area measuring 4,55,175 acres (about 1,82,060 hectares) during the financial year of 1975-76. It is hoped that during the next financial year an area of about 12 thousand acres would be brought under irrigation. The work on the Ravi Project, the biggest irrigation scheme of the state, is progressing satisfactorily. This project would cost about Rs. 36 crores to the state exchequer and on completion it would provide irrigation facilities to 1,33,200 acres (about 53,260 hectares) of land. The work is also in progress on the other irrigation schemes.

The state has established a Ground Water Board to coordinate the activities of all agencies busy in locating groundwater resources. The assistance of Central Ground Water Board is also being obtained in this regard. Currently five rigs are operating in this direction in the state. The state is striving to make an optimum use of the ground as well as surface water so that more and more cultivable area can be brought under irrigation.

The agreement with regard to the construction of Thein dam is likely to benefit this state. On completion the multipurpose project would extend the benefits of irrigation, water-power, soil conservation, employment, recreation etc. not only to the state of Jammu and Kashmir only also to the adjoining states of Punjab, Himachal Pradesh, Haryana and Rajasthan.

CHAPTER

5

Handicrafts and Industries

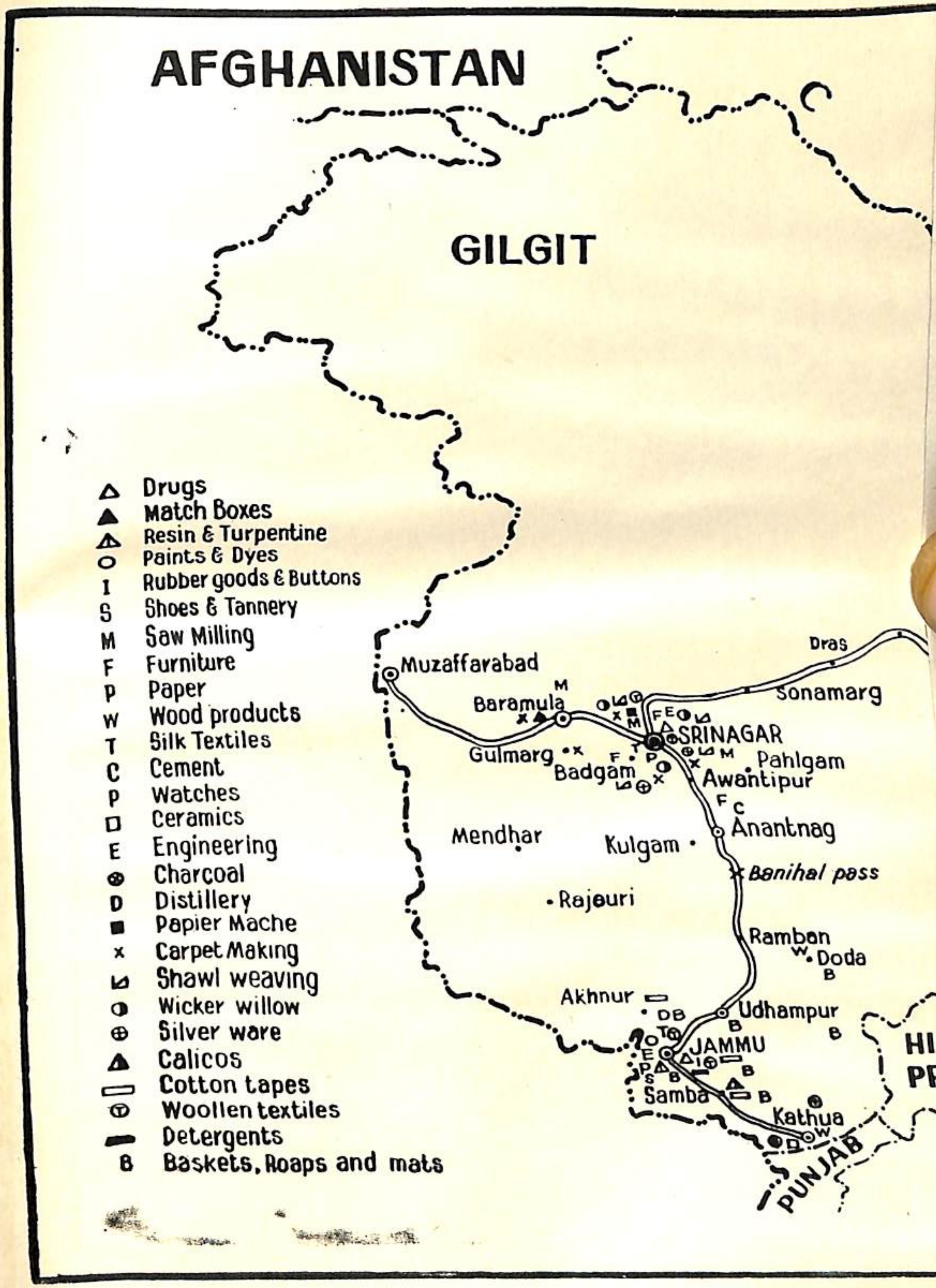
The Kashmiri handicrafts that produce art goods are known in many parts of the world since ages. Carpets, rugs, woollen and fur garments, silver ware, papier mache, stone jewellery, wood carving, embroidery, wicker willow work, *kangri* making etc. speak of the creative intelligence of the Kashmiris. Kashmiris who work as porters, poney suppliers and boatmen for tourists during summers retreat to indoors for making art goods in winter which are sold to the tourists next summer. With the approach of winter the Kashmiri craftsmen collect foodgrains, fodder and firewood. Thereafter with a *Kangri* which keeps their bodies warm they work indefatigably and meticulously and carry forward the tradition of producing art goods. In ancient times when the region had few contacts with the outside world the princely patronage sustained the art good production. With the opening of this tract to outside world these goods with light weight but rich art found market in India and abroad. In modern times the scenic splendour of Kashmir started attracting an influx of tourists from far and wide. The tourists who appreciated the handicrafts of Kashmir gave a spurt to the production of these art goods.

King Zain-ul-Ab-ul-Din has enriched the land and culture of Kashmiris in more than one way. This benevolent and God fearing king introduced the art of carpet and shawl making in this area. He encouraged many foreign artists and especially those from Samarqand to settle in the valley and teach the local populace the art of making light weight art goods. These foreign artists rendered a yeoman's service in imparting training to the Kashmiris in the field of art and decorative goods. "There is little doubt that the master artists came from Persia, for to this day papier mache is known as *Kumangiri*—that is, the illustrations of the bows and arrows of Persian soldiers, and many of the more lovely productions of the artists who execute their work for those who are able to pay the price of their time, are of finer Persian design. A small colony of these descendants of the master craftsmen who proudly remind one of their Persian ancestors, still survives in Srinagar and is known as Kumangarpura"[1] The art of paper making also reached India through Kashmir. King Zain-ul-Ab-ul-Din is again credited with the import of this art from Samarqand. About eight centuries before the times of this wide awake ruler the paper making art had originated in China and it was China which lent this art to Samarqand. By that time the Kashmiri men of letter had been using birch leaves and birch bark for writing their manuscripts, many of which can still be seen in world museums, though state itself can boast of few only. The king Zain-ul-Ab-ul-Din started the paper making industry near Ganderbal where water-power from the cascading water was available to batter and pulp up the rags. At Nowshehra, vats were made in which pulp was turned into paper.

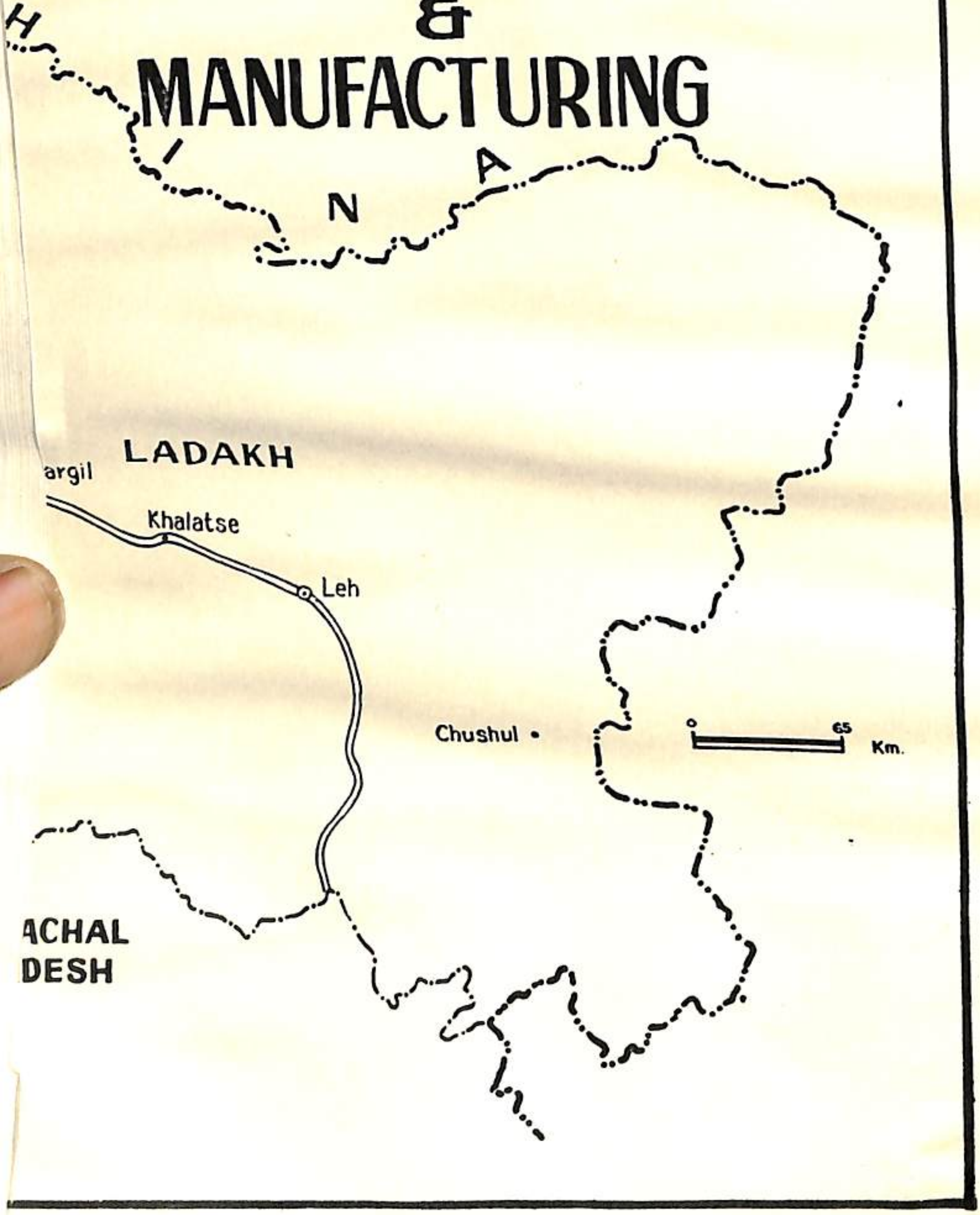
Papier-Mache

The production of papier mache is the monopoly of the state of Jammu and Kashmir. The art of making papier mache was imported from Persia in the times of king Zain-ul-Ab-ul-Din. The rich and exquisitic faunal and floral designs are painted on the paper. Flower vases, table lamps, lamp shades, paper knives, jewellery boxes, wall plaques, toilet cases bearing the papier mache art are now sold home and abroad. In recent times the competition to this art of Kashmir has emerged from a couple of centres. But the market trends show that the pieces produced in Kashmir are still preferred to other pieces even in foreign markets of the U.S.A. and the United Kingdom. This is because of the skill and

1 Gervis, Pearce, *op. cit.*, pg. 14.


AFGHANISTAN
GILGIT
Drugs
Match Boxes
Resin & Turpentine
Paints & Dyes
Rubber goods & Buttons
Shoes & Tannery
Saw Milling
Furniture
Paper
Wood products
Silk Textiles
Cement
Watches
Ceramics
Engineering
Charcoal
Distillery
Papier Mache
Carpet Making
Shawl weaving
Wicker willow
Silver ware
Calicos
Cotton tapes
Woollen textiles
Detergents
Baskets, Roaps and mats
Muzaffarabad
Baramula
Gulmarg
Badgam
SRINAGAR
Dras
Sonamarg
Pahlgam
Awantipur
Anantnag
Mendhar
Kulgam
Banihal pass
Rajouri
Ramban
Doda
Akhnur
Udhampur
JAMMU
Samba
Kathua
PUNJAB

JAMMU AND KASHMIR
HANDICRAFTS & MANUFACTURING



environment inherited by the Kashmiri art from age to age.

Carpet making

The art of carpet making is supposed to have originated in the Central Asiatic oases and especially those around Samarqand. Since Kashmir had its trade relations with Central Asia from early times, the carpets became a gift of these trading caravans to Kashmir. The Mughal Emperor Jahangir, who was a great connoisseur of art and beauty extended royal help and patronage to carpet making. He helped in the import of skill and thus developed carpet making in Kashmir. The Europeans who followed Mughals as rulers in India too showed a taste for carpets. They helped in the procurement of skilled labour besides providing raw material, finances and a ready market. This was more than enough for the establishment of carpet making factory units. Now both woollen as well as cotton carpets are prepared in the valley. Cotton required for carpet making is obtained from Amritsar whereas the wool is procured locally. At present there are about sixteen factory units with about 350 looms that make carpets. The Aksai Chin area which was occupied by the Chinese in 1962 used to supply much of the wool. Since then the industry has suffered a setback. The region exports carpets worth rupees one lakh every year to foreign countries. The third grade wool which cannot be used for carpet making is used for preparing *namdas* or felted carpets. The art of namda making was borrowed from Yarkand. Now the Kashmiri namdas are exported to countries like the Soviet Union and the U.S.A.

Gabhas are another but cheap floor covering produced in the valley. The production of gabhas is an example as to how people can make the best uses of their limited resources. Besides it speaks about the people who do not allow anything to go waste until its last use has been derived. Gabhas are prepared out of the old and worn out blankets. To give strength and durability to the product cotton and woollen threads with different shades are interwoven giving charming look to the product. Because of their skill in mending the worn out blankets the Kashmiri's have come to be known as the efficient most and skilled darners all over India. District of Anantnag is the leading producer of gabhas in the valley. About six lakh gabhas are produced and sold in Kashmir. Gabha is a cheaper floor covering and with a gradual rise in the standard of living in Indian cities gabha is becoming a popular floor covering in many middle income group families. The gabha producers should take this fact as a boon and raise

their output. The old and worn out blankets from the army and other states of northern India can be collected as raw material for this industry.

Pashmina Shawls

The superior most variety of wool is known as pashmina in India. Besides its lustre and fine quality, pashmina gives more warmth than ordinary wool. Since time immemorial pashmina had been imported from Tibet. Out of this pashmina, shawls (loose sheet like coverings mostly used by ladies during winter) have been prepared in the Vale of Kashmir. The pashmina shawl making is traced to pre-Mahabharata times in the valley. In those days exquisitely woven pashmina shawls were exported to other countries. The shawls produced in those days were so fine in texture that a shawl could pass through a finger-ring. These shawls were reputed as ring shawls in other countries. When Bernier came to the valley in A.D. 1665 he was amazed at the art of shawl making. He has paid glowing tributes to the shawl makers of Kashmir in his memoirs. The Kashmiris weave exquisite designs quite laboriously on these shawls. Because of their fineness, lustre and attractive designs these Kashmiri shawls are a prized possession of women all over the world. About 25 thousand workers are engaged in shawl making in the valley and they produce the goods worth about 2 crores of rupees every year.

Embroidery work is the off-shoot of shawl making. Now besides embroidering the shawls the Kashmiri embroiderer gives a touch of his art to many articles like coats, gowns, mufflers, caps, jackets, blouses, sarees etc. etc. The work of embroidery is mostly done by the workers in their homes.

Wood Carving and Wood Work

Wood carving and wood work has long been one of the industries of Kashmir. The region abounds in wood, the raw material required for this industry. The industry employs about two thousand workers and there are about 300 units engaged in wood work and wood carving. Fateh Kadal, Kade Kadal, Zana Kadal, Safa Kadal and Rainawari are the centres in Srinagar where one can find beautiful specimens of wood carving and wood work. It were the princes and aristocrats who patronised this industry in ancient times. Wood carving is an intricate, complex and time consuming job. There cannot be bulk production in this field unless there exists a readily available market. Formerly when princes and

royal families all over India could pay exorbitant price for these goods the Kashmiri worker used only the superb pieces of wood but of late there has been an inclination to stunt pieces. Carved wooden lamptands, tables, trays and many decoration pieces produced by Kashmiri craftsmen are found in many homes in India and abroad.

Wicker Willow

The art of wicker willow making is the gift of French artists to the Vale of Kashmir. Flower baskets, lampshades, curtain rings, wall baskets, chairs, tables, tiffin carriers and boxes are beautifully designed of wicker willow. The wicker willow plantations once introduced by French now cover a considerable acreage in the valley. The wicker willow industry has provided jobs to about 2·5 thousand workers who produce goods worth Rs. 7·5 lakhs every year. Srinagar, Hazratbal, Haren and Shalabug are the important centres of this industry. Local demand is quite limited but 80 per cent of the products reach outside the state mostly through the tourists. The industry is still in the cottage scale and it sustains on the finances advanced by the dealers who wish to sell it to the tourists in next summer. Keeping in view the increasing demand for wicker willow products steps should be taken to improve the quality and raise the production. The wicker willow trees are the state monopoly and only state can take ameliorative steps in this regard.

Silver ware

Silver ware is a unique product of Kashmir. Since the industry requires a perfection in skill the industry is limited to cottage scale only. Tea and coffee sets, bowls, fruit dishes, biscuit barrels, tea caddies, mugs and trays are made and engraved by the silver smiths in Srinagar. Soap cases, cigarette cases and powder boxes are also made of silver in Srinagar. The engraving and polishing speak of the skill and deftness of Kashmiri Silversmith.

Imitation jewellery is another side business of silver and goldsmiths. About forty cottage scale units are busy in Srinagar making stone jewellery i.e. imitation jewellery. About four thousand artisans are employed by these units. The artisans who possess artistic imagination and long patience work minutely and produce attractive pieces of stone jewellery. Bracelets, broaches, tops, bangles, rings, ear-rings, cuff links, buttons, cigarette cases, soap cases, ash trays, flower vases etc. are prepared by the artists.

Jade, tiger gold, cat's eye, glass beads and many other stones are used as raw material.

In the Jammu tract though crafts requiring high craftsmanship, minute attention, excellent skill and long patience are absent yet Jammu tract is not without its traditional small scale industries. The trouser-tape i.e. *nara* weaving is an age old industry of the villages around Jammu. Sumailpur, Kot Palwal, Bishnah and Sarbah villages are particularly known for this job. Jammu excels in the art of nara weaving. Now many tourists and visitors visiting Jammu demand naras. In view of progressively increasing demand for this article the dealers supply the yarn to ladies in villages and get the naras woven to order. Besides white naras the trouser tying tapes in many colours and designs are now available in the market. Jammu nara is prized for its softness.

Samba a tract of Jammu area is known for its prints. Cloth printing or calico printing has been in vogue at Samba from early days. But because of the superior type of printing with the help of machine this indigenous industry is on the decline. In Jammu tract the farmers prepare baskets, ropes and mats etc. for their own use.

The Government of Jammu and Kashmir have embarked upon a well conceived programme to further develop the world famous handicrafts of the state. The markets for these goods of artistic taste and rich value are being explored in the oil rich Middle Eastern countries. The Jammu and Kashmir Handicrafts Corporation has in an impressive way pushed up the sales from merely 80 lakhs to 1·25 crores recently.

Industry

Industrially the state of Jammu and Kashmir is very little developed. Only about 9 per cent of the total labour force of the state is engaged in industry. Out of it about 75 per cent of the labour force is engaged in household industry. The state has a rich mineral potential and also enough of the raw material for forest based industries. The climate of the state is quite suitable for the manufacture of precision goods. It is quite strange that a state with such rich potentialities should lag behind in the field of industrial production. The causes responsible for such a state of affairs are quite clear. Very few areas under princely rule witnessed the development of modern, heavy and large scale industry. In those days, the royal patronage extended to only handicrafts of artistic value and high costs. From this point of view state had a rich heritage. No doubt with high mountains the state possesses

a rich water-power potential but very little of it has been developed. Coal is found in very meagre quantity. In this land with snow and difficult terrain, means of transport and communication have not developed to an extent that an industrial state needs. Above all there has been not enough of political stability here. The region faced three massive invasions from two neighbours besides oft repeated cease-fire violations. Because of this reason the private industrial entrepreneur has been shy of investing in the state.

Textile Industry

Woollen and silk textile industry are comparatively large scale concerns of the state. About 92 units produce woollen and silk textile goods in the state. Silk is produced both by handloom as well as powerlooms. But large scale silk manufacturing plants are located at Srinagar and Jammu. In all there are eight silk manufacturing factories three of which are owned by the government. At Srinagar the factories are located at Sulina, Hawal, Rainwari, Mughal Masjid and Chhota Bazar. The state produces about 7·5 lakh metres of silk fabric every year.

The woollen textile industry is a large scale public concern. About 1800 spindles, twenty powerlooms and 45 handlooms manufacture woollen fabrics in the form of serges, tweeds, worsted, blankets, rugs and *loies*. More than half of the raw wool required is imported from Australia, New Zealand and the United Kingdom.

Textile industry which is the largest industry of the state and employs about half the industrial labour of the state is now facing many problems. The silk industry depends mainly on the mulberry trees. Unfortunately most of the mulberry tree bearing tract has gone under the illegal occupation of Pakistan. On the other hand most of the sheep breeding area of Aksai Chin that supplied finest type of wool has been forcefully captured by the Chinese. However, the state launched mulberry plantations and sheep breeding farms are likely to ease the situation in near future. But now the woollen and silk textile mills are facing a stiff competition from the synthetic and mixed yarn. Like many of the textile mills elsewhere in the country the state textile mills shall have to go for diversification.

Forest based Industries

As already stated the state possesses a rich wealth

in the form of raw material for forest based industry. The forests are easily workable and besides supplying wood for wood carving units have started supplying wood to other wood based industries. A good start has already been made in the field of plywood, wood veneers and ceramic ware. The state owned joinery mills at Pampore near Srinagar annually produce 20 thousand doors, 60 thousand windows and 80 thousand rafts of tongue and grooved boards. The plant also manufactures top quality furniture worth about rupees one lakh every year. A Rosin and Turpentine factory at Miran Sahib near Jammu has been set up. About 30 thousand quintals of Oleoresin is distilled here annually. The Kashmir Willows at Miran Sahib also manufacture about 60 thousand cricket bats every year.

Other Industries

A factory producing 60 to 70 tons of *cement* daily has been set up at Wuyan in Anantnag district. The factory uses locally available limestone but procures coal from Bihar coalfields. The Khrew Cement plant with an annual capacity of about 2 lakh tonnes is being established with a cost of Rs. 19·40 crores. To accelerate the work on cement units an undertaking, the J and K Cement Ltd. has also been set up. The Kashmir *Match Box* industry produces this article of daily use at Baramula. The Hindustan Machine Tools have set up their *Watch Factory* at Srinagar. Similarly the Indian *Telephone* Industries have started their unit in the valley. Both these units make annual production worth Rs. 160 lakh and 17 lakh respectively. These units have already offered jobs to 300 and 125 persons respectively. The plans are afoot to expand both these units. *Drug* manufacturing is also carried on in the state and about 90 per cent of the demand of the state medical department is met with locally.

A factory of *ceramic wares* like sanitary fittings, sanitary wares and electric insulators has been established at Kathua. The installed capacity of this unit is about 700 tons but now with the added facility of railway transport it is likely to get a spurt. At Jammu and Srinagar *metalware and engineering* units have come up that produce articles like rounds, hooks, wire nails, pins, barbed wire, towerbolts, hanging rods, bolts, handles and many other products needed for bridges and hydroelectric projects. *Leather goods* are produced worth Rs. 50 to 60 thousands every year. The rice husking, flour milling and oil milling are other noteworthy factory units of the state. Sugar and jaggery (*gur*) are also prepared in the plain tract of the state. At Hiranagar and

Kathua charcoal is made out of the wood of kikar, shisham, pilan and shishra. The Kashmir Fruit and Chemical Industries distil many types of *wines* at Hazuri Bagh near Jammu.

During the period of planned development the state has taken many steps to accelerate the industrial development in the state. A chain of 20 Industrial Estates with over 300 sheds has already been constructed in the state. The government also extends package of incentives to entrepreneures. These incentives include industrial plots on nominal rents, interest free loans to set up diesel generators where power is not available and about 50 per cent subsidy in the transport costs on export of finished goods when transported through Government Transport Undertaking. The state authorities have rightly accessed the rich natural resources and are taking steps for their proper utilisation so that a number of viable industrial ventures can be initiated in the state. To create a proper investment climate the Government are negotiating with outside industrial houses and persuading them to invest in this state. Recently the Hindustan Levers have set up a three crore *Synthetic Detergent* plant at Bari Brahamanan near Jammu. Two paper projects have been cleared for the private sector. Gangial and Bari Brahmanan in Jammu and Zainkote and Panthachok in Kashmir have been developed as new Industrial areas.

CHAPTER

6

Population

On the dawn of April 1, 1971 the state of Jammu and Kashmir had a total population of 4,616,632 or about 46·17 lakh persons. It consisted of 2,458,315 males and 2,158,317 females. In other words the number of females per thousand of males was 878. Out of this total population 81·41 per cent of the people lived in the countryside whereas 18·59 per cent were classed as city dwellers or urbanites. The ruralites lived in 6,503 villages spread over the entire length and breadth of the state. The urbanites lived in 45 towns. The largest number of towns *i.e.* 9 were located in the district of Anantnag. The districts of Srinagar, Poonch, Rajouri and Ladakh had the lowest number of towns *i.e.* two each. There were 239 uninhabited villages also in the state with 35 uninhabited villages in Anantnag district alone. The districts of Ladakh and Doda with 3 and 2 uninhabited villages respectively had the lowest number of uninhabited villages. The state had only two towns *i.e.* of Srinagar and Jammu at the dawn of current century.

The state as a whole is one of the least populated states of India. It stood sixteenth in the states of India according to its total population. The region is sparsely populated because about 90 per cent of its area is mountainous which is also equally unsuit-

able for cultivation. Moreover the harsh climatic conditions do not permit the development of other professions. Even otherwise under normal conditions the fertility is higher in hot and wet regions and not in dry, semi dry and cold areas. In the year 1961 the state had a population of about 36 lakhs. The increase of about one million in such a large state over a full decade is quite insignificant. But the fact is that the distribution of population in the state itself is quite uneven, as is evident from the following table :

District	*Persons*	*Rural*	*Urban*	*% of Scheduled caste pop. to total population*	*% of workers to total population*	*Density per sq. km.*
	(LAKHS)					
Anantnag	8·32	7·58	0·74	0·01	31·11	155
Srinagar	8·28	4·05	4·23	0·01	28·87	275
Baramula	7·76	7·10	0·66	0·01	31·06	104
Ladakh	1·05	0·97	0·08	0·01	43·76	8
Doda	3·42	3·23	0·19	8·89	36·09	29
Udhampur	3·39	3·11	0·28	19·59	31·20	74
Jammu	7·32	5·41	1·91	28·23	24·44	231
Kathua	2·75	2·50	0·25	22·83	26·72	104
Poonch	1·71	1·57	1·14	0·12	27·65	81
Rajouri	2·17	2·09	0·08	6·75	27·77	103

About half of the total population of the state is concentrated in the Vale itself which otherwise covers about 7 per cent of the area of the state. A still closer examination reveals that nearly 70 per cent of the total population of the state lives in the four districts of Anantnag, Baramula, Srinagar and Jammu covering about 13 per cent of the area of the state. Whereas the district

of Anantnag is densely populated, the Ladakh district is sparsely populated. The district of Ladakh which covers about 70 per cent of the area of the state has only about 2 per cent of the total population of the province. With the exception of Eastern Himalaya where density of population is about 15 persons per square kilometre the state of Jammu and Kashmir with an average density of population of 20 persons per square kilometre has the lowest density in India. Inside the state itself the density also varies from district to district. The district of Srinagar with 275 persons per square kilometre has the highest density and is closely followed by Jammu district with 231 persons per square kilometre. All other districts had lower densities. The lowest density, however, is recorded in the district of Ladakh. Here on the average eight persons live in a square kilometre. The further analysis of density data reveals that urban areas had far higher densities than rural areas. In urban density of population too the district of Srinagar with 4,098 persons per square kilometre of urban area leads. In this district also the density is the highest within the municipal limits of Srinagar where 4,867 persons live in one square kilometre of area. The rural density in this district is only 139 persons per square kilometre. The lowest rural as well as urban density of population is observed in Ladakh. There are only two towns of Leh and Kargil in this district. But these settlements are not really towns in the modern sense. These are just service stations.

The following table shows that the growth of population in the state has though been slow but steady. The entire state registered a total growth of 115·8 per cent during these seven decades meaning thereby that the population increased at the rate of 16·5 per cent per decade or about 1·65 per cent per year. But this growth has also not been uniform throughout the state. The district of Srinagar registered an increase of 159·8 per cent during these seventy years and ranked at the top. The lowest increase of 74·1 per cent was recorded in Ladakh. Still further examination shows that the urban population increased at a faster rate than rural population. The urban population recorded a growth of 440·6 per cent in these seven decades while rural population increased by merely 89·8 per cent during the same period. The district of Jammu registered the highest urban population growth *i.e.* 429·6 per cent whereas the Doda district showed the highest rural population growth *i.e.* 117·7 per cent.

Till the year 1961 the average decadal increase has been low and tolerable but the 1961-71 decade showed an alarming and unprecedented growth in the population of the state. Prior to

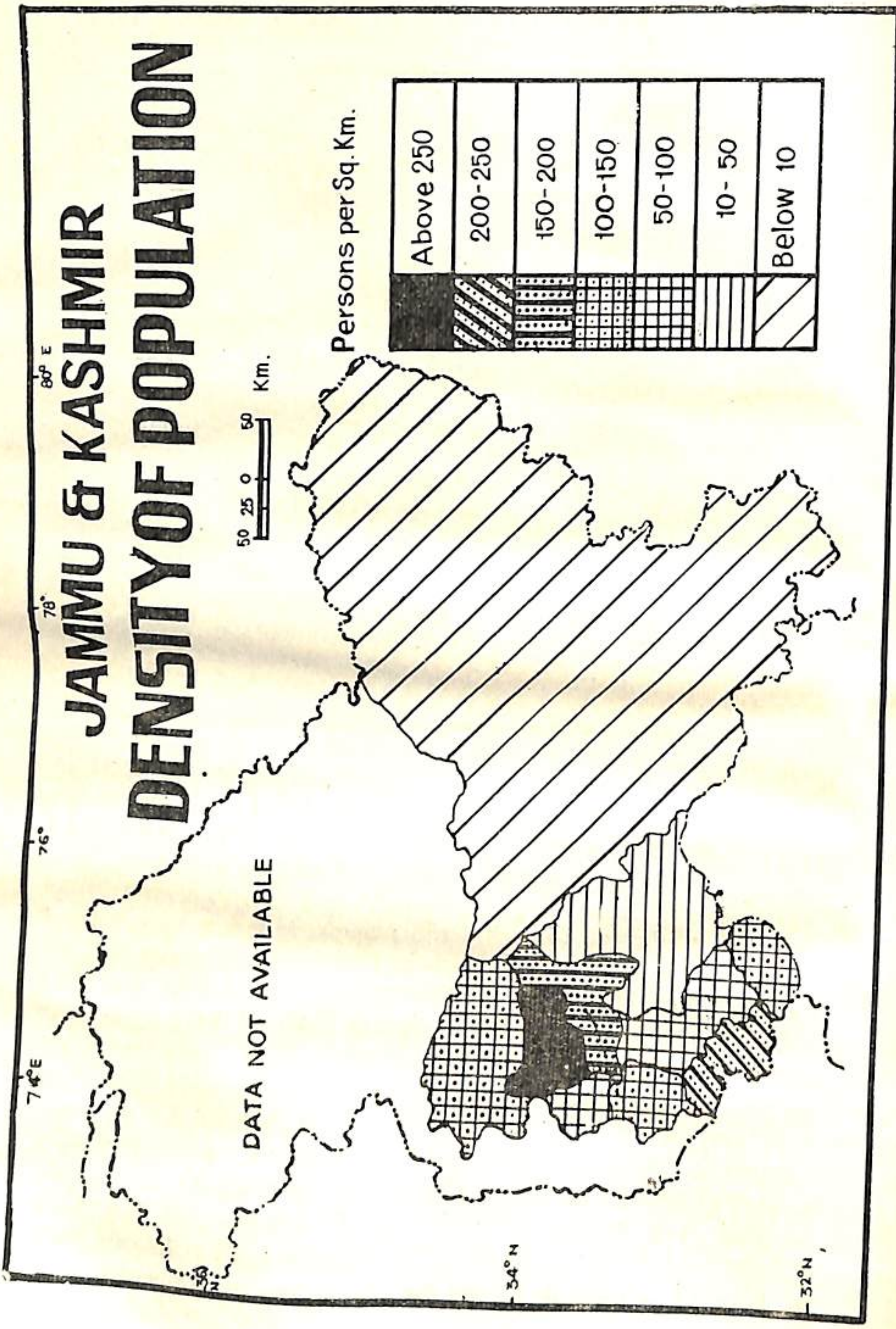
DECADAL VARIATION IN POPULATION SINCE 1901

Year	*Persons*	*Decade variation*	*Percentage decade variation*
1901	2,139,362		
1911	2,292,535	+ 153,173	+ 7·16
1921	2,424,359	+ 131,824	+ 5·75
1931	2,670,208	+ 245,849	+10·14
1941	2,946,728	+ 276,520	+10·36
1951	3,253,852	+ 307,124	+10·42
1961	3,560,976	+ 307,124	+ 9·44
1971	4,616,632	+1,055,656	+29·65

NOTE : Due to unstable conditions prevailing in the state in early fifties consequent upon naked Pakistani aggression the 1951 census could not be taken in the state. The figures quoted in this table are based on estimates.

that the epidemics like cholera, plague, influenza and natural calamities like famines and floods had been taking heavy toll of life every now and then. Moreover the first world war and Pakistani aggression also caused heavy loss of life. The first world war alone took twenty thousand lives from the state. Because of Pakistani aggression also, many people lost their lives and many left the state for other parts of the country. Unstable political conditions have also been responsible for slow growth of population in the fifties. "Restriction on acquisition of land and property by the non-Kashmiris also has been responsible for slow growth rate."[1] However, after the initiation of planned development, spread of means of transport and communication, breakthrough in the field of industry and trade,

1 Raina, A.N., *In India*, *op. cit.*, p. 367.


JAMMU & KASHMIR
DENSITY OF POPULATION
Persons per Sq. Km.
Above 250
200-250
150-200
100-150
50-100
10 - 50
Below 10
50 25 0 50 Km.
DATA NOT AVAILABLE
74°E
76°
78°
80° E
34° N
32° N

check over floods, famines, epidemics etc. population has started showing an unprecedented upward trend. A mountainous state like Jammu and Kashmir cannot undergo a heavy strain of large population. Therefore it is essential that the ugly head raised by the unprecedented trend of population growth is nipped in the bud. All possible steps to control the population growth must be taken and growth rate brought to zero.

About 8·26 per cent of the total population belongs to scheduled caste. The Hindu dominating areas of Jammu, Kathua and Udhampur districts had the largest number of scheduled caste people. The percentage of scheduled caste population to total population in these districts was 28·23 per cent, 22·83 per cent and 15·59 per cent respectively. On the other hand the Muslim dominated districts of Anantnag, Srinagar and Baramula and the Buddhist dominated district of Ladakh contained only 0.01 per cent of scheduled caste population each of their total numbers. This presents a sad and gloomy picture of the caste ridden Hindu society.

Nearly 29·6 per cent of the total population consisted of workers in 1971. The largest number of workers *i.e.* 8·9 lakh were engaged as cultivators. About 41 thousand people did not own any cultivable land but worked as agricultural labourers on the others' fields. In this state of forests and meadows about 50 thousand people eked out their living from forestry, fishing, hunting etc. etc. Though potentially a rich state as far as its hidden mineral wealth is concerned, still it employed only 1850 people in mining and quarrying in the year 1971. This speaks of the neglect and underdevelopment of mineral wealth which can otherwise become a sound footing for state's industrialization. The household industry including the handicrafts engaged about 55 thousand people of the state. Construction activities offered employment opportunities to about 3 thousand people. Trade and commerce engaged about 61 thousand people. These proportions are quite low and speak about the lack of initiative of the people. Transport and communications absorbed only 44·5 thousand workers. Other services gave jobs to about 1·6 lakh people. It is quite clear that either the people pursue their age old and traditional profession of farming or prefer to be in services and hesitate to invest in commerce, business and trade. There is a need of diversification in this respect. These vocations should be developed and pressure on the land must be decreased. Disguisedly unemployed people in the agricultural sector can also be gainfully employed in these professions.

On the whole the average rate of literacy in the state in the

year 1971 was 26·75 per cent among men. The rate of literacy among women was merely 9·28 per cent. The overall rate of literacy for the entire state was 18·58 per cent. All these literacy figures are far below the all India literacy rates. The literacy rates for the country as a whole for the above cited groups were 39·5 per cent, 18·7 per cent and 29·5 per cent respectively. Low rate of literacy is one of the reasons responsible for the slow rate of development in the state. Now when there are two universities, 42 colleges, and about 8300 schools in the state the state should not lag behind other states in the field of literacy. The strategic location of the state still more needs wide awakening of citizens.

The state of Jammu and Kashmir is the abode of many races of people. In the plain and semi hill tract of the state lying south of the Pir Panjal mountains the Dogras dominate. Dogras speak the Dogri language which is a Pahari form of Western Hindi and quite nearer to Punjabi. Dogras are a marshall race and since time immemorial they have always been in the forefront to defend the frontiers of our motherland. Rajputs dominate among Dogras. The Chibs, Jamwals, Samials, Mians, Bhaoos, Manhas, Charaks etc. etc. are the famous exogomous groups among the Dogra Rajputs. They are equally good at the plough as at the sword. Dogras are respected all over the world among the marshall races of India. Even among the Muslims the converts from Rajput Dogras are a fighting race. In the tract formed by the districts of Poonch, Rajouri, Muzaffarabad and Udhampur the semi nomadic Gujjars and Gaddis dominate the scene. It is gathered that the semi nomadic Gaddis were also once Rajputs and they migrated to these hill tracts from Rajasthan during the repression and atrocities committed on them by the then Muslim rulers. The Gadi dialect they speak at present resembles the Rajasthani. It is believed that the Rajputs of Rajasthan could not tolerate the inhuman treatment meted out to their women folk by the Muslim rulers. Those who were able bodied took a vow to do or die. However, they managed to send their women folk and young children to safer places in the northern hills. To eke out their living these women and their children took to livestock and sheep rearing. Since they did not have their own land for their permanent settlement they adopted nomadic grazing as a means of livelihood. The Gujjars on the other hand are Muslims. Their dress and language is akin to the dress and language of Punjabi Pathans. Brave but hot tempered Gujjars breed buffaloes and supply milk, cheese etc. in the towns of Kashmir.

The inhabitants of Kashmir valley are quite different from other people living in the rest of the state. Legend goes that in the

earliest times the valley was inhabited by *Yakshas* and *Pishachas*. Since the times of king Kashyap the Brahmins have been dominating the valley. But later on the Muslim invaders from outside either converted many of them at the point of the sword or compelled them to flee or slaughtered those who resisted either of their move. Slowly and gradually the Islam started dominating the scene. But the closer examination of Kashmiri Muslims reveals that they still have closer cultural affinities with the valley Hindus than outside Muslims. The greatest benefit which has accrued from this conversion is that Kashmiri Muslims stand as one clan and they are free from the caste sub-divisions and its drawbacks. However, their division among Sunnis and Shias has at times been responsible for class rivalries. Currently the Sunnis are in majority. On the other hand the Hindus living in the valley are the victims of caste division and rituals. They suffer from the evils of untouchability. Now when the regulations regarding the menace of untouchability have been tightened, let us hope that these brethren of ours would see to reason for their own betterment. Not to speak of high and low castes but even the Kashmiri Pandits are divided into 133 *gotras*. But it goes to their credit that Kashmiri Pandits are a highly learned class and they have given very many intellectuals to our nation. Late Pandit Jawahar Lal Nehru, our first Prime Minister who laid the foundations of the edifice of development, progress and learning came from the Kashmiri Pandits.

On the whole Kashmiris are peace loving cultivators and very often live in boats on lakes and rivers. They are great artists and produce many kinds of art goods. During winters they live in doors, and make art goods. A fire pot called *Kangri* in Kashmiri is kept hung on the bare body inside loose woollen garments. This keeps their body warm and they go on attending to their minute work requiring quiet and calm atmosphere.

The Skardu-Deosi tract is inhabited by the *Dards* who are believed to be the purest specimen of ancient Aryans living in the state. Many of the Dards have been converted to Islam but those who escaped conversion are still Buddhists. The *Baltis* of Gilgit and Baltistan region are the mixture of Dards and Ladakhis. Dards and Baltis are mainly agriculturists and animal breeders. Their surroundings seem to have overpowered these people and unless they are helped from outside to overpower their surroundings they are bound to live in poverty, scarcity and despondency. The invention of early maturing varieties of crops, spread of education, development of means of transport and communications etc. etc. can come to their rescue. The

Ladakhis live in Ladakh. Those living in and around Kargil are mostly Muslims while those living in and around Leh are Buddhists. Ancient Bhotas living in this tract are said to be the forefathers of present day Ladakhis. Like all other hill people the Ladakhis are sturdy people capable of negotiating high mountains.

CHAPTER

7

Cultural Heritage

The state of Jammu and Kashmir and particularly the lovely Kashmir valley with its variegated charms has been the functional fountainhead of culture and art in the East. By the meeting of ancient caravan routes in Central Asia, Kashmir located on cross-roads became a converging as well as diverging point of various cultures. In its spacious surroundings, picturesque vistas and verdant vales, Kashmir has harmoniously blended those cultures and produced a civilisation distinctive of her people and heritage. History stands as witness that Nalanda, Takshshila (Taxila) and Kashmir formed world reputed seats of higher learning in ancient past. In the wake of commercial communications the caravans brought scholars and saints to this nodal point from different parts of the world who exchanged ideas on religion, literature and like. While the Arabic scholar Alberiuni called Kashmir "the high school of Hindus Sciences", the Chinese traveller Huen Tsang remarked, "The people of Kashmir love learning and are well cultured." When Aryans came to India thousands of years ago they made Kashmir also as one of their earliest dwellings. The Aryans composed many parts of Vedas and Upnishadas in Kashmir. Many epics on religion were also written in this para-

dise on earth. The Vedas compliment not only the mighty rivers of Ganga, Yamuna and Saraswati but the Vetasta and other ancient streams of Kashmir also. The *Vetasta* is still sacred to the Kashmiris. In old times for Kashmiris the confluence of Vetasta and Sindhu was similar to the holy place of *Prayagraja*, containing many sacred spots linked with old sages and saints. Kashmir has often been referred to as *Rishi Bhoomi i.e.* land of saints. Kashmir has been closely associated with different parts of India with regard to religion and culture. When Buddhism found its roots deep into the Indian soil, it found its way to the surrounding lands of Tibet, China, Afghanistan and Central Asia through Kashmir. Khanishka the exponent of Buddhism called the third Buddhist Conference at Kanispura in Kashmir. Kashmiri Brahmins were renowned as astrologers and astronomers. Kashmiris have made remarkable contributions to history, Sanskrit literature, music and art. Many great Kashmiri volumes were translated by Chinese and Tibetan scholars for the benefit of their own lands. Tibet also adopted the *Sharda script* of Kashmiri. Brij Vihar, Sharda and Harwan were then the renowned seats of higher learning in Kashmir and Kashmir as a whole was known as *Shardapeeth*. Many foreign scholars were immensely impressed by the scholastic pursuits of Kashmiri scholars.

Chronicle

Rajatarangini of Kalhana is a store house of knowledge about Kashmir of ancient past. Champak was a minister in the court of king Harsha (AD 1089-1101). The Brahmin minister Champak was himself a great scholar but he was gifted with a son, potentially excelling his father in academic pursuits. Kalhana, the son was brought up in a Brahaminic way of life and thus he found opportunities to learn history, literature and Sanskrit. After the death of Harsha, Champak and his son Kalhana, severed their relations from the court. Thereafter Kalhana started collecting material for his *Rajatarangini*. He depended on the chronicles of the past as also on the works of a couple of earlier writers. He drew heavily on the material supplied by the earlier scholars like Helaraja (8th century AD), Ratanakara (AD 872-900) and Kshemendra (AD 990-1065). Surprisingly the great scholar has nowhere mentioned his name in the *Rajatarangini*. The volume imparts knowledge about Kashmir from fifth century to author's time. It reveals an account relating to the old Kashmir rulers, their administration and the way of life of those times.

The geography of Kashmir, holy places, Buddhist monasteries, temples and mosques find a special treatment in this book. The old traditions of Kashmir have also been described. The book also introduces the names of such Sanskrit scholars who have been renowned for their scholastic contributions. In nutshell it is said that in want of this volume, much of the Kashmiri history, literature and tradition would have remained unrevealed.

After the death of Kalhana the work of history writing was continued by other Kashmiri writers. Jona Raja in Sanskrit and Mulla Ahmad in Persian perpetuated the Kalhana tradition during Zain-ul-Ab-ul-Din rule. Besides writing '*Tarikh-Waqai-Kashmiri*' Mulla Ahmad translated the Mahabharata in Persian. Jona Raja brought out the second volume of *Rajatarangini*.

Language and Literature

As in its natural environment, so also in dialects and languages used, the state has a variety. Consisting of diverse people, who have different modes of living the residents of Jammu and Kashmir speak and use different dialects and languages. About thirteen different languages and dialects are now in vogue in the State. The chief among these are Dogri, Kashmiri, Punjabi, Hindi, Urdu, Pahari, Ladakhi and Dardi. English as elsewhere in India is widely used in offices, educational institutions and other organisations.

The inhabitants of Dugar, *i.e.*, the tract lying on the left bank of Chenab in Jammu region speak Dogri, though Punjabi is also used by some sections of the populace. The hill folk of Ramban, Poonch, Rajouri, Kishtwar and Bhadarwah speak Pahari whereas in the western mountainous region near to Dugar, Chabali is used widely. Kashmiri is of course the dominating language in the Kashmir region across the Pir Panjal mountains. In the frontier region of Gilgit and Ladakh the Tibetan group of languages are used. The main languages spoken here are Bhotia and Shina. Bhotia is the language used in Ladakh. But it should not be forgotten that the great literary heritage of the state is preserved in Sanskrit and Persian.

Rajatarangini makes a mention of many past Sanskrit scholars. Matrigupta, Muktapid, Jayapid the three Kashmir rulers in the sixth century were also good Sanskrit poets. Vasnanda wrote *Samar Shastra*, Bhameh wrote *Kavyalankar*. Shiv Swami, Anandvardhana and Ratnakar were renowned scholars. Abhinavgupta was a reputed scholar, thinker, philosopher and critic. Kshemendra was a great linguist and he studied almost all the

languages then prevalent in India. *Bharatmanjari*, *Ramayanmanjari*, *Brihatkathamanjari*, *Neetimala*, *Neeti Kalpataru*, *Kavikanthabharan* etc. are some of his famous books. In the same period, Kaiyat, Mummat and Som Dev contributed their mite to Sanskrit literature. Similarly Bilhan, Jalhan and Mankh earned their names in Sanskrit literature. But with the spread of Islam in Kashmir, its cultural and political history took a new turn. The classical Sanskrit tradition suffered a setback and Persian took its place which was then made the court language in Kashmir, yet quite opposed to the expectations this era did not bring about any radical changes. "Instead, it brought about a harmonious blending or amalgamation of the new and old, giving birth to new cultural traditions in Kashmir's renaissance. It was a new phase in the history of Kashmir, and, coincidental with the growth of Persian literature, it ushered in the development of local Kashmiri literature, which absorbed in its vocabulary both Persian and Sanskrit words."[1] This amalgamation of Sanskrit and Persian in Kashmiri language exhibited a remarkable capacity for development later on and bequeathed a rich legacy of cultural synthesis.

Persian and Sanskrit remained court languages for long times and became also the language of learned few. The general masses in the early days used Prakrit as their *lingua franca*. Slowly and gradually the admixture of Sanskrit and Persian words alongwith words from many other languages spoken in the surroundings led to the birth of a new vernacular, Kashmiri. Many European and Kashmiri scholars are of the view that Kashmiri is an offshoot of Sanskrit language. "Dr. Grierson's researches have, however, shown that there is, in addition to the Indo Aryan or Sanskritic group and the Iranian group, a third one in the Aryan branch of Indo-European the Dardic, which is intermediate to the Iranian and Indo-Aryan, and that Kashmiri is intimately connected with it."[2]

The use of Sanskritised versions of Kashmiri proverbs by Kalhana in Rajatarangini shows that Kashmiri had become quite popular by the advent of 12th century. But the earliest authentic work in Kashmiri appeared about a century after Kalhana. Written in old Kashmiri the volume was entitled as *Mahanay Prakash* and was authored by Siti Kantha. The book aimed at finding the loftiest truth through Tantric rituals. Thereafter there is a gap of over a century in Kashmiri literature.

1 Kaumudi, *op. cit.*, p. 42.
2 Bamzai, P. N. K., *Jammu and Kashmir*, New Delhi (1973), p. 19.

But it does not mean that the onward march by the language had come to a halt. With the appearance of Laleshwri on the literary scene the valley hummed with a literary revival. She propagated her doctrine in the language of the masses which by then had become quite rich.

Laleshwri, affectionately known as Lal Ded or Lalla Arifa or Granny Lalla among the valley masses came of a fairly well to do Brahmin family. After her marriage she was ill treated by her husband as well as mother-in-law. Besides not being properly fed and clothed she was accused of being immoral. The unhappy family life and constant slants at the hands of her mother-in-law turned her into an ascetic and she became a wandering minstrel. Tired of the maltreatment she left her house for good and took upon a roaming life. She preached self denial, purity, renunciation and non attachment through her self-composed verses. Representing the teachings of the then Kashmir's religious system and oldest extant specimens of Kashmiri language, her verses compiled in *Lalla Vakyani* are popular even to the present day. She recognised the virtues of all religions but condemned the rituals. This dancing ascetic was influenced greatly by the Iranian saint Sayyad Shah Hamdan who then lived in the valley.

Sheikh Nur-ud-Din the mystic saint was a contemporary of Laleshwri. Popularly known as *Nund Baba or Nund Rishi* the Sheikh is still sacred to Hindus and Muslims both who till this day pay annual pilgrimage in thousands at his shrine at Tsrar Sharif. He propagated the gospel of love and devotion and preached for spiritual and cultural unity. His patron Sultan Zain-ul-Ab-ul-Din held him in high esteem. His sayings collected in *Rishinama* have immortalised this great saint who also chose Kashmiri, the language of masses for his preachings. Deep mystic thought, philosophy, love and intense devotion to the Almighty form the basis of his utterances and verses.

After Sheikh there is again a gap of about one century in the Kashmiri literature. It was with Habba Khatun the 'Royal Lyricist' or 'Poetess-Queen of the Vale' that Kashmiri literature and especially the poetry entered a new phase of love-lyrics. Habba Khatun's original name was *Juni—i.e.* moon. She became a victim of child marriage. By the time she came up of her age she had developed an intense hatred towards her farmer husband. Fond of singing she started singing in farms and meadows while at work. In her songs she enshrined the precious memories of her childhood and the exuberant moments of her youth. One day the prince Yusuf was attracted by the melodious voice and charming looks of Juni during one of his hunting muses. Juni too fell prey to the looks of

that handsome prince. Juni's husband was already tired of her and readily agreed to divorce her. After divorce she became the queen of Yusuf's heart. With their marriage Juni was renamed as Habba Khatun. Though fortune had smiled on her but for a very short period. King Yusuf was got imprisoned by Akbar in 1586, who himself desired to rule over this beautiful valley. Yusuf was exiled to Bihar and was never allowed to visit Kashmir. Wandering endlessly in hills, dales on riversides and lakes she spent her last days searching and waiting for her husband. She abandoned the royal palace and put up in a hut. The graceful looking hillock on the bend of the Kishenganga near Gurez reminds of this great Kashmiri poetess, singer and musician. Haba Kadal the second bridge over the Jhelum, stands as monument to her sacred memory. The songs and verses she sang in the separation of her husband have become the valuable treasure of the *Lol i.e.* Love-Lyric form of Kashmiri poetry. Time has been unable to dull the freshness of her songs. Her songs are even now on the lips of Kashmiris.

Arinamal was another Lol-Lyricist of Kashmir. Disappointed in love she also burst in touching and appealing lyrics. Her husband Bhagwan Dass Kachru left her and got remarried. Though allowed to live in the lower portion of the same house Arinamal had to undergo many sufferings and agony. Devoid of mystical and philosophical contents her verses breath in natural and earthly love. Compared to joy of living and gaiety there is more of pathos in her love songs. Written in chaste Kashmiri the love songs of Arinamal speak volumes about simple natural love. Thenceforth much has been written on mysticism, epics, romance, biography, fables, philosophy and grammar in Kashmiri. A dictionary of Kashmiri language was also compiled.

The modern period of Kashmiri starts with the beginning of nineteenth century. Since at that time Persian was the court language it was very much influenced by the Persian language. Prakash Rama's 'Ramayana', Mohmud Gamis' romance 'Shrin Khusro' Maqbool Shah's 'Gulrez', Saif-ud-Din's tragedy 'Akanandun', Wahab Pare's 'Shahnama', Parmanand's 'Sudama Charita' etc. are some of the contributions of this period. With the turning of century Ghulam Ahmad Mahjur voicing inner feelings of the rustic opened up a new era in Kashmiri poetry. Abdul Ahmad Azad propagated for a socialistic pattern of society. Masterji *i.e.* Pandit Zinda Kaul gave devotional and patriotic lyrics. Pakistani aggression of 1947 gave an impetus to a resurgence in Kashmiri literature. Dina Nath Nadim and Rahman Rahi led a popular movement in Kashmiri literature against the hostile activities of Pakistan. Amin Kamil, Nandlal Ambardar, P.N. Dhar, P.N. Premi,

G.A. Mushtaq, Mohi-ud-din Akhtar, A.M. Lone and D.N. Almast are the new pioneers of current Kashmiri literature.

In the medieval times Kashmir also contributed to the Persian language and literature. Muhammad Tahir Gani who flourished in 17th century stands pre-eminent in the galaxy of Persian poets that Kashmir has produced. Munshi Bhawani Das Kachru, Taba Ram Turki 'Betab', Pandit Raj Kaul 'Arzebri', Pandit Raj Kak Dhar, Farrukh, Muhammad Zaman Nafi and Sheikh Yaqub Sarfi are some of the other Persian luminaries produced by Kashmir. Kashmiri scholars have also produced biographies, travelogues, books of theology and philosophy in Persian. Now Persian is not being used as a medium but its offshoot Urdu is being properly nurtured in the state. Urdu is being properly professed in the state. Pandit Dina Nath 'Chikan Mast', Pandit Nand Lal Kaul 'Talib', Kamal-ud-din-Shaida have earned name as Urdu poets. Shamim Ahmad 'Shamim', Abdul Ahad 'Burq', Noor Muhammad 'Roshan' and Ghulam Rasool 'Nazki' are among the noted Urdu prose writers of India.

Dogri has been recognised as one of our national languages. Besides using it as broadcasting language proper steps are being taken to propagate this language. The Jammu University has recently started a department for the development of this regional language. Novels, short stories, one act plays and other literary forms have already started appearing in Dogri. The state of Jammu and Kashmir is also proud of its writers in English. Pandit Ram Chand Kak, Prof. Jayalal Kaul, Pandit Prem Nath Bazaz and Jia Lal Jalali are among the notable Kashmiri writers in English. Pandit Anand Kaul has extensively written in English on Kashmir's folk lore, history and literature.

Music and Melody

The nature has provided Kashmir with equally charming and melodious music. The echo of hills and dales, the romance created by meandering streams, the pleasant breezes, snow covered lofty and towering peaks, beauty and charm of flowers, the separation and union of loving souls and pleasure loving lives of palatial buildings alongwith mysticism and philosophy have found their way in the Kashmiri music. Like the hills and dales of Kashmir that have inspired the music, the musical traditions of Kashmir are equally old. Classical and folk music have furthered side by side. The music apart from being Indian has also been greatly influenced by Persian style. Since Kashmir has always been within the orbit of Indian culture, many Indian musicians

adorned the courts of Kashmiri rulers. King Jaluka and king Lalitaditya rendered a yeoman's service in the propagation of Kashmiri music. From 8th to 15th century every village in Kashmir had its own opera and theatre. Every village had its own orchestra and group-dance. Shrines and temples invariably had musicians and singers attached to them. The Muslim and Mughal rulers were very fond of music. King Zain-ul-Ab-ul-Din was himself a great classical singer. *Soofiana Kalam* or mystical poetry was the often sung music in Kashmir. In the submontaneous region *Pahari* music has flourished. Like all other hilly areas the Pahari songs are sung at the time of reaping, harvesting threshing etc. etc. In the outer plain the music and songs similar to Punjab are prevalent.

Ladakh is inhabited by Buddhists. The monasteries play a singificant role in the cultural and artistic life of Ladakh. The community music and community dances are the prominent items on social and religious occasions. Because of monasteries the music in Ladakh is a sort of sacred ritual.

Associated with the folk music the *Bhands* have earned the reputation as folk singers. Music, dance, drama and burlesque combined are the ancient traditions carried on by *Bhands*. Essentially singers of the common folk the *Bhands* present ancient legends, heroic battles, court intrigues and stories of the past through their performances.

Folk Tales and Folk Songs

Folk tales and folk songs represent the natural reactions and responses of human beings towards their natural surroundings. Bequeathed from generation to generation the folklore depicts the hopes, urges, desires, prejudices superstitions, beliefs, myths, traditions, customs, and manners of the people. Thus the folk songs and folk tales have exerted a tremendous impact on the mankind. The folklore can never be confined to the land of its origin, instead it transcends political and natural barriers. Kashmir the land of murmuring streams, snow-capped peaks and historic remains consists of an immense wealth of folk tales and folk songs. The folk tales like *Gulala Shah*, *Bombur and Lolare*, *Himal and Nagraya*, *Zohra Khotan and Haya Band* etc. are completely and purely of Kashmiri origin. But the ones like *Mirza-Sahiban*, *Laila Majnu*, *Shirin Farhad*, *Yusuf Zulaikha*, *Heer Ranjha*, *Sassi-Punnu* etc. though now influenced by local environment are adaptations and modifications of tales imported from Persia and neighbouring provinces. Apart from these

romantic folk tales many folk tales related to the loot and plunder of highway robbers are also prevalent in this state. Kashmir valley is a very good venue for narrating love stories and ballads and especially during long dreary nights The families assemble around the central fire and listen with apt concentration the folk tales as narrated by those who have been doing this job since long.

Equally attractive and fascinating are the folk songs of the state. In the outer hills and outer plains the songs prevalent in Punjab are very common. These folk songs are sung by women on the occasions like birth, marriage etc. Accompanied by *Dholak* or pitcher the folk songs present a large variety of theme and content. In the valley itself there are songs meant for every occasion. Apart from social ceremonies the folk songs are recited while picking saffron flowers, pounding rice, harvesting crops, fetching water. The fishermen, shepherd, wood cutters and labourers also work to the tune of folk songs sung by their work mates. Many folk songs adorn the slender cypress, majestic chenar, sweet smelling saffron, blossoming plums and many moods of the Jhelum.

Art and Architecture

Housing various schools of thought and culture, Kashmir became a renowned seat of art and learning. One of the earliest homes of the Aryans, this tract with eternal mountains and attractive surroundings invited the seekers of truth and knowledge from distant lands. Many creeds and religions throve here to spread light to other lands. This gave rise to a distinctive spiritual tradition and culture. Many great shrines and monuments, now in ruins were erected to remind of these great traditions to the posterity. Those grand spiritual and cultural achievements find an embodiment in the present architectural ruins littered all over Kashmir. Arthur Neve is perfectly true when he says, "Ancient India has nothing more worthy of its early civilization than the grand remains of Kashmir." Kalhana called the Kashmiris *Shastra-Shilpina i.e.* architects.

Since time immemorial Kashmir has been known far and wide for its art and architecture. Apart from honouring men of letters and getting towns built the old Kashmir rulers also got erected beautiful shrines, and monasteries. After the Buddhist art of Kushan rulers Kashmir came under the influence of Hindu art. But Hindu art too was influenced by the Buddhist art to a greater extent. The Buddhists got many monasteries built and got

the huge statues of Lord Buddha established therein. Besides, the statues of many men and women were added to these monasteries. On the bricks and stones of that period flower carvings and other decorations were added. The ruins of Buddhist art are still found in Harwan and Vushkur. The Grecian influence also penetrated into Kashmir through Gandhar and Buddhist arts. It were the Kushan kings of Gandhar who imported Gandharian art in Kashmir. At a later stage the Islamic art also influenced the Kashmiri art. "All these varied ideas and symbols, in the form of Buddhist Stupas and Viharas, Hindu architectural decoration and relief sculptures, Islamic simplicity and massiveness, and the slender and elegant Grecian pillars and columns, have survived to this day in spite of centuries of political upheaval and devastation."[3] These faded and half crumbled ruins speak volumes about the ancient art and architecture of Kashmir.

In Avantipura (original *Vishvaika-sara*) about 28 kilometres from Srinagar on the right bank of the Jhelum are located the jumbled ruins of two temples *Avantiswamin* and *Avantishavra*. Constructed by Avantivarman, these two shrines consisted of huge blocks of limestones as building material. Now licking dust, the magnificence of these temples can be guaged from their imposing gateways. The smaller temple on being excavated has shown rich and elaborate carving. The standing pillars, large detached columns and arched recesses testify the great work undertaken by king Avantivarman.

About six kilometres from Anantnag are found the ruins of Martand temple on Srinagar-Pahalgam road. Occupying a unique site and dedicated to Sun-god the Martand temple was got built by king Lalitaditya. Because of its bold contours, vast dimensions, massive and imposing looks it has rightly been called, "The Architectural lion of the Kashmir Valley". The temple measures about 20 metres in width, with dimensions of the flute pillared quardrangle 73 metres by 44 metres. There is one lofty central edifice, arouud which there is a small wing on the each side of the entrance. Cunningham is of the opinion that originally the shrine consisted of an observatory with astronomical instruments.

The old town of Paraspur or *Parihaspura* established by king Lalitaditya also contains remarkable monuments of considerable interest. The ruined mounds of old buildings and shrines present a fascinating and thrilling site. The jumbled masses of huge blocks and crumbled buildings remind one of the Kashmir of Yore when its varied impacts crossed the political barriers.

3 Kaumidi, *op. cit.*, p. 29.

Equally remarkable are the ruins of a temple at Pandreth about six kilometres from Srinagar. A six-square metre temple sculptured in a resistant rock rises from the centre of a pool surrounded by chenar and willow trees. Though fading at present the site still reminds about the grandeur imposed by this architectural jewel in ancient past. The original city of *Shrinagri* got built by Asoka covered this site. The oldest monuments are found at Harwan. "The temples at Pattan, seventeen miles (about 28 kilometres) from Srinagar, built by Shanker Varman (AD 883-901), and those at Bandi and Buniar, apart from their cultural and artistic importance, are great archaeological treasures."[4] The cave temples at Bhaumjo near Anantnag, the ancient shrine at Payech, ruined temples near Thyun and Wanghat in Sind valley present other specimens of Kashmiri architecture. Wanghat is that place where Saint Vashishta had his *ashram* (abode) and king Sandimat had his *Vanaprastha i.e.* renouncehood. It is gathered that Kalhana also wrote his *Rajatarangini* here. "The ruins of *Pari Mahal* or the Abode of Fairies, rising from the waters of the Dal lake, are like a call from a legendary world. They are reminiscent of the days when the Mughal Prince Dara Shikoh built these edifices for housing an astronomical observatory as well as a library."[5]

Today these ruins though constantly crumbling are still vibrating and have been a great source of inspiration for the legends and songs of Kashmir valley. "The sight of their half broken columns and crumbling pillars, dilapidated arches and propped up roofs, inspire awe and reverence. In them, one can glimpse the whole evolution of Kashmir's cultural past—wars and battles, death and destruction—at the hands of a Vandal or times unconquerable agencies."[6]

Kashmir has been known the world over for its handicraft art. The French physician—adventurist who visited Kashmir in 17th century paid eloquent tributes to Kashmiri handicrafts. Kashmir had very close relations with Persia and Persian impact is quite visible on Kashmiri handicrafts. The papier mache work travelled from Persia to Kashmir. The state has been known for its wood work and ivory work for many centuries. There is a great Persian influence on the art of embroidery in Kashmir. The *nakkashi* work of golden and silver wares as well as on the walnut wood is worth seeing. Cane work has also touched new

4 *Ibid.*, p. 32.
5 *Ibid.*, p. 33.
6 *Ibid.*, p. 33.

heights in Kashmir. The Kashmiris, however, excel in the art of shawl and drug making.

Proverbial for their velvety softness, dainty texture, attractive designs and exquisite workmanship the Kashmiri shawls were treasured as precious gifts by ancient Romans. Persian princes and princesses vied with each other in the procurement of this excellent gift. Napolean Bonaparte in his Nile expedition found a charming Kashmiri shawl. He was fascinated by that piece to this an extent that he gifted it to his beloved Josephine who was spell bound at the sight of it. Maharaja Ranjit Singh was taken aback by one such gift. Even the British were so enamoured by Kashmiri shawls that vide Amritsar Treaty they got three shawls every year from the Kashmir ruler.

Though the art of shawl making must have been very old in Kashmir yet in medieval times it was king Zain-ul-Ab-ul-Din who gave impetus to this handicraft. Akbar also gave a great fill up to this art. The designs on these shawls are generally geometrical, Persian in origin, but the embroiderer fits in many floral motifs in it borrowed from his surroundings. The meandering Jhelum, which has otherwise affected the Kashmiri life finds its impact on shawls also in the form of zig zag waves. Lotus and chenar leaves are also embroidered on the shawls. The embroidery on these shawls consists of three types viz., embroidering on plain base cloth, weaving the pattern alongwith base cloth and by weaving the pattern as integral part of the base cloth. Now the embroiderer also uses silver and golden threads for embroidery. These shawls have a large market at home and abroad.

Kashmir has also been known for its pictorials' and drawings' traditions. Even *Rajatarangini* speaks of painted halls. More than Kashmir valley, Jammu is known for its school of painting. When Muslim invaders chased the petty Rajput chiefs of Rajputana the latter sought shelter in hills. Fond of art and painting these Rajput chiefs patronised artists even in their refuges. In the reign of last Great Mughal Aurangzeb the persecuted artists also found their way in these hills and took shelter with these chiefs. Thus the Jammu School of painting became an offshoot of the Rajasthani School. Bhasoli and Poonch earned their name in this field. "It was thus in the inaccessible retreats of these Himalayan states that the last of the Mughal artists and painters, were nurtured into the indigenous traditions of Rajput culture, flourished and became instrumental in developing varied shades of local schools of art and painting."[7]

7 *Ibid.*, p. 141.

Simple in conception and bold in line drawings Jammu paintings may be styled as crude or primitive. Every miniature contains a high horizon at the top. Influenced by the natural environment the artist has irresistably depicted the floating clouds, lightning flashes and misty white drops of falling rain. Again under the impact of surroundings and varied seasons the artists predominantly depend upon the various shades of green, yellow and red colours. In these paintings the themes have often been borrowed from the epics and Puranas. These dramatic themes also suited these artists in sojourn. Durga slaying an unholy *asur* and Lord Shiva in the form of *Rudra* bringing destruction to all life on the earth from lofty Kailash have been the major themes for these artists. On the other hand the Kashmiri art is more influenced by Persian style than by Rajput School. No doubt many traditional and literary references to the Kashmiri art of painting are found yet few authentic pieces are available for study. It was Sir Auriel Stein in AD 1931 who brought to light some of the works of Bhaishajya Guru Sutaram an artist of Buddhist themes. These works were accidently found by a cowboy in the northern hills and throw light on the prevalent religious practices. References to pictorial art are also gathered in the works of Kalidas and Harsha Vardhana. The Nilamata Puran an original work of Kashmir also advocates the decoration of shrine walls with pictures and paintings.

CHAPTER

8

Ladakh—The Land of Strategic Importance

Surrounded by lofty mountain ranges with perpetually snow capped peaks Ladakh which remained a cross road on the medieval trade route, today commands a strategic importance. Originally the international borders of Pakistan, Afghanistan and China touched Ladakh, but now we find Pakistani intrusions on the western side and those of China on the eastern side. Since these intrusions the strategic importance of this area has still further been enhanced. Gumri, Dras and Kargil lying near the cease-fire line have to be constantly guarded against Pakistani intrusions whereas Chushul, Changli and Kyari have to be guarded against Chinese intrusions. Fierce battles have already been fought on these fronts in 1947, 1962, 1965 and 1971.

Considered to be the "entry door" of the Aryans Ladakh is very often termed as the staircase leading to the world roof. The tract is also called as 'Break door' of the Chinese. In Tibetan it is known as '*Latag*' *or* '*Ladak*' but now it is very popularly spelled as "Ladakh" though it is pronounced as and also written as 'Laddakh' in vernaculars. Formerly this area was also called as *Mar Yul i.e.* 'red soil' and *Nagrees i.e.* 'land of snow'. It is an oft repeated fact that Aryans halted along the banks of river

Sindhu or Indus while entering into northern India from their original Central Asiatic home. From Central Asia the river Indus is reached first in Ladakh. Ladakh was also located then on the trade routes linking Kashmir and Kabul with Tibet, China and Central Asia. Hence it is correct to believe that Ladakh was the entry door of the Aryans to India "Fifty miles from Kargil, in the village of Garkon lives a community of 700 people who are reputed to be the purest living descendants of the original Aryans. They grow their hair long and are said never to bathe in their entire life."[1] These people are known as the purest living survivors of the Aryan race. "They inhabit Darchik and Garkum (Garkon) villages of Kargil tehsil and adjoining hamlets of Dah and Hanu in Leh tehsil of Ladakh."[2]

Location

The entire tract of Ladakh apart from being rugged and elevated is also table land in nature which lies between 32°45′ N to 35°50′ N latitudes and 75°42′ E to 80°30′ E longitudes. The Kuen Lun range and the slopes of Karakoram mountains bout this tract in the north. Baltistan and Kashmir lie to the west of Ladakh whereas the districts of Rudok and Chumurti of western Tibet are situated in the east. Districts of Chamba and Lahul-Spiti lie towards the south of Ladakh. Mountainous terrain dominates the relief of Ladakh. The mountain ranges lying south of the Karakoram have a north-west to south-east trend. "This general direction of mountain chains determines the courses of the rivers as well as the natural boundaries of Ladakh."[3] Austin Godwin or K2 is the highest peak of Ladakh. Second to Mt. Everest in height K2 is now under the illegal occupation of Pakistan. Besides a good chunk of western Ladakh, Pakistan has also occupied the territories of Chilas, Dariyale, Gilgit, Hunza and Chitral. The Zojila pass (3413 metres or 11,578 feet) separates the Ladakh tract from Kashmir valley. Almost covered with snow throughout the year the pass is open to traffic from June to October.

Leh, Kargil and Skardu are the three tehsils of Ladakh. Skardu is occupied by Pakistan. Kargil though geographically, historically and politically forms a part and parcel of Ladakh yet

1 Singh, Rahul, *Ladakh Opens its Doors* in Illustrated Weekly of India (14-20 December, 1975).

2 '*La.'akh in Ferment*' IV A Times of India Supplement, (November 10, 1975).

3 Cunningham, A., *Ladak Physical, Statistical & Historical* (1854), London, p. 16.

culturally it forms a distinct unit. Kargil is hundred per cent Muslim dominated country whereas in Ladakh Buddhists form a majority. But the Muslims living in Ladakh cannot be easily distinguished from Buddhists.

The Indus, Shyok, Nubra and Zanskar are the important rivers of Ladakh. In Ladakh a river is called as *chhu*. The Indus is known as *Singgechhu*, nearly a corrupt form of Sindhu. The valley of Indus embraces about 80 per cent of the area of Leh tehsil. Running from south-east to north-west the river passes through the entire length of the area. It has been a most populous part of the Ladakh tract. It is also a fertile tract of the region. Shyok is the best known tributary of the Indus. Nubra is the right bank tributary of the Shyok. Nubra has given birth to the most fertile area of Ladakh i.e. Nubra valley. Falling on the ancient caravan route from Leh to Yarkand, Nubra valley has always been a singnificant part of Ladakh. This Valley is comparatively warmer and forms the home of apples, apricots, walnuts and grapes.

Climate

Completely landlocked and far removed from oceans Ladakh experiences extreme continentality. Extremes of cold and dryness are the chief characteristics of the climate of Ladakh. Summers are quite short and mild whereas winters are extremely cold and prolonged ones. Precipitation is mostly in the form of snowfall in winter. Summer rains are rare. The annual rainfall is limited to 5-7 centimetres. Many places record about 25 centimetres of rainfall in one full decade. Because of their layout the mountain ranges offer no resistance to winds and hence the scanty rainfall. "In the thin atmosphere insolation and radiation alike take place at an extreme tempo; mechanical disintegration of the rocks is rapid, and the saying that a bare headed man with his feet in the shade can get sun-stroke and frost bite simultaneously may hardly be an exaggeration."[4] Relative humidity is very low. The area is dry to this an extent that even barley cannot be grown without irrigation. Because of dryness, thundering and lightning too are occurrences. Snow which falls is also powdery and the same blows off or is absorbed within a short time.

In this vast land natural vegetation is almost non-existant. Hence even fuel wood is a problem of this region. The excretion of animals is mostly used as fuel. Wood is available in Nubra

4 Spate, O.H.K., *India and Pakistan*, London (1956), p. 387.

valley. Elsewhere poplar and deodar trees in thin numbers are found along the courses of streams only. Wood is no scarce that even funerals are costly. Mostly the Buddhists have created funeral furnaces for each dynasty. In these furnaces mainly the excretion of animals is used as fuel.

History

The earliest history of Ladakh is lost in oblivion. Sufficient source material on this subject is not available. Chronicles of Ladakh dealing with the ancient period mainly deal with cosmogony and have no historical value. The only fact which comes to light through these chronicles is that Tibet and Ladakh have a common ancient history. Infact then Ladakh was a part of Tibet. The spiritual order in Ladakh then was supervised by a Lama head taught and trained at Lhasa. This tradition was continuously in vogue till recently, when Chinese interventions in Tibet sealed the border with Ladakh.

The Chinese traveller Fahein has also mentioned about Ladakh in his memoirs. He says that Buddhism was prevalent in Ladakh in 250 B.C. The famous British traveller and historian Cunningham is of the view that when the kingdom of Tibet disintegrated some time in 10th century AD, it was divided into many principalities, each governed by ambitious chieftain. All of them established independent rules. Thereafter till 16th century we do not find any traces of the history of this land. It is gathered that in AD 1580 Chovang Namgayal a close relative of ruler of Tibet sought shelter in Ladakh after being expelled from Tibet. He succeeded in carving his own kingdom in Ladakh. Slowly and gradually he expanded his frontiers to include Chang Marangi, Lodang, Purang, Guge, Langati, Shigar and a couple of other neighbouring principalities. He also planned of invading Yarkand but before he could put this idea into practice the Yarkand ruler himself surrendered to him.

After his death Chovang Namgayal was succeeded by his brother Jamya Namgayal. All the vassals accepted his supremacy but the chieftain of Purik not only refused to accept his subjugation but also conspired with Amir Ali Mir of Balti to invade Ladakh. Smelling this conspiracy Jamya Namgayal invaded Purik, but his forces could not march further because of a snow storm. Finding an opportunity the rulers of Purik and Balti surrounded his forces. Jamya Namgayal was imprisoned at Skardu. Amir Ali Mir wrought a havoc thereafter on Ladakh. He ruthlessly demolished the temples and monasteries in Ladakh.

Many of the statues of Lord Buddha were broken and destroyed. Almost all the volumes pertaining to religion, theology and history were drowned in the Indus. He set Ladakh on fire and came back to Skardu. Finding it beyond his means to control Ladakh from Skardu he freed Jamya Namgayal. As a gesture of good intentions and friendship Amir Ali Mir got one of his daughters married to Jamya Namgayal. On his arrival back in Ladakh, Namgayal was given a hearty welcome. He was persuaded by his countrymen to re-establish the statues of Lord Buddha and to procure books on religion, theology, and history from Lhasa.

Namgayal got two sons from the princess of Balti, Singme Namgayal and Norbu Namgayal. Since in accordance with his wishes he could not get the temples and monasteries rebuilt within stipulated time, he got frustrated and very shortly breathed his last. He was succeeded by his elder son Singme Namgayal who had a military acumen and farsightendness parallel to his uncle Chovang Namgayal. Soon he brought the principalities of Guge, Kiprok and Tipi Chagyan under his subjugation. At that time Balti was ruled by Amir Ahmad Khan who invaded Ladakh but was defeated by Singme Namgayal at Kharbu. On his way back Singme Namgayal brought the principalities of Chaprang and Lomor Tang also under his subjugation. Encouraged by these successes he planned of invading Tibet. He had reached Sri Kirkir when he was presented with a peace treaty and numerous costly presents. In a way Tibet bought peace and Singme Namgayal returned to Ladakh. Singme ruled over Ladakh for half a century from AD 1620 to AD 1670.

After his death he was succeeded by his eldest son Delton in Ladakh. Delton's period is full of intrigues and revolts mainly masterminded on the appointment of his minister Shakyajya Cho who, however, proved to be an able warrior. He made many rebels to surrender. He succeeded in overpowering Karchi and Balti also. But these successes did not last long. The Sakyo tribe invaded the Ladakhi forces at Dalang Kharmar and succeeded in annexing some of the territories of Ladakh.

Delton was succeeded by his son Delak Namgayal who got married to the princess of Lomastag. He ruled for about 35 years from AD 1705 to AD 1740. He succeeded in annexing Spiti to Ladakh kingdom. The grip of these rulers started loosening slowly and gradually. The last ruler of Namgayal dynasty was Tsepal Namgayal who was neither sound in his administration nor in his mind. He ruled in the days when Ladakh was visited by Moorcraft an adventurist British traveller.

In the year 1834 Maharaja Gulab Singh the then ruler of Jammu, after annexing Kashmir valley planned of capturing Ladakh also. He sent his forces under his trusted Dogra General Zorawar Singh. On 16 August 1834 a fierce battle was fought at Sanku between Dogra and Ladakhi forces in which Ladakhis faced a humiliating defeat. After leaving a small contingent at that place Zorawar Singh proceeded further. He defeated another Ladakhi force at Pashkum. The dawn of a severe winter threatened the plans of Zorawar Singh. He wanted to come to terms with Ladakhis but the latter thought of availing a golden opportunity. They adopted guerilla war tactics, but to their misfortune the Dogra forces played hide and seek till the winter was out. As soon as the summers approached the Dogras waged a full scale battle on Ladakhis and defeated them. Zorawar Singh after negotiations put Tsepal Namgayal on the throne with conditions that the latter shall pay Rs. 20 thousand annually as offerings to Maharaja Gulab Singh besides a war indemnity of Rs. 50 thousands.

As soon as Dogra forces left Ladakh the Kashmir Governor Mikhan Singh instigated Ladakhis to revolt against Dogras. Finding winter on and consequently all the passes closed the Ladakhis revolted and destroyed the Dogra cantonment at Susoo. This act enraged Zorawar Singh who returned to Ladakh and defeated the revolting Ladakhis. This time he gave such harsh punishments that no parallel punishment had yet been witnessed in this remote snow bound land. He posted a strong contingent at Ladakh under the command of Dewan Daya Ram. Next year on his visit Zorawar Singh found that Ladakhis were again conspiring for a revolt. Zorawar Singh dethroned Tsepal and exiled him to the village of Stog from the capital. He fortified Leh and appointed Danrov Stanjan as Governor of Ladakh. Next year even Stanjan revolted. He too was dethroned and again Tsepal was throned. No doubt the Dogra general had won Ladakh but the Ladakhis every now and then raised the banner of revolt. In 1840 a Ladakhi leader Sukhmir revolted against the Dogra rule but he was publicly hanged. This created an awe in the mind of Ladakhis and now onwards Dogra forces felt fully settled in Leh. Zorawar Singh after completely subjugating Ladakh thought of annexing Tibet also. In the end of 1841 he invaded Tibet but in the bloodiest ever battle that followed, Zorawar Singh fell under the spear attack of a Tibetan. The terror created by Zorawar Singh is still bequeathed in the form of stories from generation to generation in Ladakh. A full size statue of Zorawar Singh in Leh still speaks of the ferocity of the man.

Economy

The rocky, barren and cold Ladakh is neither fit for cultivation, nor pastoral activity, nor forestry and nor for the development of roads and industry. But man ekes out a living wherever he lives. Because of rugged, undulating and boulder strewn land cultivation is practised on a very limited area. The rigours of climate put further restrictions. Only about 0·1 per cent of the total land is given to farming. Barley, *grim* (a variety ot barley), gram, some wheat and vegetables like peas and turnips are grown. Agriculture in the land of meagre and uncertain rainfall is impossible. Hence areas in and around river valleys are only given to farming Here zig zag water channels locally known as *Kuhals* are taken out of the streams and rivulets to water the nearby fields. Because of irregular and variable flow of water, the streams cannot be dammed for irrigation purposes, yet in flat basins like that of Leh the *kuhals* or diversion channels have been dug out. Small mountain and seasonal torrents have been dammed by people at many places to take out *kuhals* that provide water to a limited area for a limited period. The water is often carried for long distances through these streak like channels. The land is levelled with human hands and most of the agricultural operations are carried out by man's sinews. A very crude and primitive technique of farming is practised. Amazingly enough 90 per cent of the Ladakhis depend upon farming for livelihood. The Government have started four agricultural (demonstration) farms at Nubra, Changthang, Saspool and Kargil. On these farms researches in the farming of pulses, cereals and fruits are carried on. Experiments have been carried out in the cultivation of apples, Australian grapes, paddy and walnut, but because of nature's niggardliness, climatic rigours and absence of speedy means of communications the results have not so far percolated to every farm household. Buckwheat, mustard and millets are also grown here and there. Lucerene (*ole* in local language) is cultivated on about 20 per cent of the farm land. Lucerene is stored as hay, the winter fodder for horses, yaks etc. *Zoe* a cross breed between cow and yak is also domesticated for milk. Animal husbandry development programme has been given a boost in Ladakh. In the Mathoo experimental farm cross-breeding experiments are being conducted. Russian Merino sheep, with their high wool off take, are being crossed with the local hardier variety. The Ladakhi goat is also being cross breed with Angora goat for getting better and more pashmina wool.

Leh has been a reputed centre for Pashmina trade since old

times. About 25 lakh rupees worth of pashmina trade is carried out in Ladakh. But this is less than quarter the quantum it used to be in the past. The pashmina producing region of Aksai Chin is now under Chinese occupation. About forty thousand pashmina yielding goats are found in Ladakh at an altitude of 4,200 metres and above. The Tibetan antelope famous for yielding *Shah Tush* the most superior wool is hardly found on this side of the cease-fire line. The traders pass on the finest pashmina as *Shah Tush*. The nomads who rear pashmina goats still carry on a barter trade. They receive grain, sugar, salt and tea in exchange of pashmina wool.

Efforts are afoot to preserve the Zanskar stallion (renowned for its fast trot) and the Chang Thang *i.e.* Lhasa Apso dog (the only dog in the world capable of fighting a wolf) both of which are facing extinction. A few years ago this dog roamed unwanted but now it has become a priced animal. Army officers purchase these pets as souvenirs. At Leh alone about sixty families are maintaining kennels to rear these dogs. Each small sized pet fetches 300 to 400 rupees. The business has now reached such a stage that the rare breed might soon become extinct. To safeguard against such an eventuality, the authorities have started a Lhasa Apso Dog Nursery at Chonsppa.

"According to local leaders, there has been little development activity. Funds earmarked for development often lapse. To some extent the charge is justified. One of the reasons for the non-utilisation or under-utilisation of grants is the fact that information regarding their sanction reaches Leh only in late August or September though the financial year begins in April. By that time the summer is almost over. The District Panchayat Officer, Mr. M. L. Tandon has suggested that the financial year in Ladakh should be from January to December."[5]

For modern economic development roads are the *sine qua non* and more so in mountainous regions where the entire infrastructure has to be taken on wheels to the scattered hamlets. In ancient past some trade routes to Central Asia, Tibet and China passed through Ladakh, but the trade passed on men and mule backs and no roads were required. Road construction is a recent activity necessitated mainly because of strategic reasons. The 432 kilometre Srinagar-Leh road is one of the treacherous roads in the world. It has been a graveyard of hundred of vehicles. It seems as if the nature has taken a revenge for unwanted intrusion. The road negotiates through some of the steepest hair

5 *Ladakh in ferment-I*, Times of India, New Delhi, November 7, 1975.

pin bends. "It comes as no surprise to learn that the road takes a fearful toll of the army : five to six trucks hurtle down the mountain side every year, after killing all the jawans inside them."[6] It is estimated that one man has been killed for every kilometre of road constructed in this difficult and mountainous area. Now Leh has also been linked with Simla by way of Hindustan Tibet road.

People

Ladakh tract covers about 70 per cent of the total area of the Jammu and Kashmir state but the total population of the region has hardly crossed one lakh mark in recent years. The factors affecting distribution and density of population have worked almost negatively here. High altitude, rugged terrain, want of sufficient oxygen, barren hill sides, climatic rigours, lack of means of transportation and communication have disfavoured the natural growth of population. Since the means of livelihood have been quite scanty and limited people in the past had devised ways and means of keeping the population well under control. The practice of polyandry and law of primogeniture inheritance were primarily meant for checking the population growth. To send younger sons and daughters to monasteries to become lamas and chomos also indirectly aimed at population control.

The population overwhelmingly consists of Buddhists and Muslims. The Kargil area is entirely populated by Muslims whereas Leh region is dominated by Buddhists. A few families of Hindus, Sikhs and Christians also live in this tract. Some Gujjars and Bakarwals are also found in this remote land. Sometimes the nomadic herders, Hanjis can also be seen roaming here. After Chinese occupation of Tibet, some Tibetan refugees have also crossed over to this side who still lead a camp life here. The army troops stationed in this zone have offered some employment opportunities to local as well as refugee inhabitants of this area. The construction of roads, bridges and buildings employ a large number of unskilled labour. The construction activity also employs mules and horses as load animals. With these activities an average Ladakhi feels himself better off.

The people are mostly short statured but with solid physique. Some of them are robust, tall and sturdy. Like Aryans they possess vast shoulders and chests but have sunken eyes and emerging cheeks. Humble, well behaved and God fearing Ladakhis

6 *Ladakh Opens its Doors, op. cit.*

away from show are the true sons of nature. About a decade and half back they lived so close to the nature that they did not light lamps in their houses. They had been performing their day to day duties in daylight and moonlight. Because of their deep faith in religion and God the Ladakhis are honest, tolerant, co-operative, sympethetic and true in their dealings. Toleration is probably their basic faith. Some time in a family a brother is a Buddhist while the other may be a Muslim. No doubt they profess different faiths yet they live under the same roof. They present a shining example of mutual co-operation and brotherhood to those who shed the blood of numerous human beings in communal strifes. In Buddhist monasteries Mohammadens have been offered respectable positions. They are illustrious beyond imagination. One would prefer to die than beg alms. There are no beggars in this otherwise poor land.

Like Tibetans Ladakhis have been polyandrous in past. Low fertility of soil, limited cultivable land, lack of other supplementary vocations etc. have been the causes responsible for the prevalence of polyandry in this tract. But the critical analysis of this phenomenon leads us to believe that polyandry prevailed only in poor and middle class families whereas prosperous families practised even polygamy. Polyandry was banned more than three decades ago but it is still prevalent in remote and inaccessible villages. "Mr. M.L. Shastri, a Sanskrit teacher in Leh's School of Buddhist Philosophy, says that when he was headmaster of the Timosgam High School from 1971 to 1973, every family in that area was polyandrous."[7] Recent findings reveal that although youngmen of new generation look down upon this tradition yet polyandry is prevalent in Zanskar villages and Nubra valley. But there is never any bitterness or tension in a polyandrous family. In fact the wife or her husbands hardly ever think that they are doing something abnormal. In past when people have been going for trade to Central Asia, China, Tibet, Kashmir and Afghanistan at least one brother was required to stay on to look after the common wife. They so arranged their trade and agricultural activities that turn by turn only one brother stayed at home.

The woman in Ladakhi society is given a significant status through some special rights. In accordance with the law of primogeniture if daughter is the eldest she would inherit the entire property after the death of her father. If she wants to get married she can bring a husband of her choice to her own place.

7 *Ladakh in Ferment--I, op. cit.*

Such a husband known as *magpa* in Ladakh has nothing to do with the economic assets of his wife. Like a true hen-packed husband he dances to the tunes of his wife. He has no right to leave his wife. Wife on the other hand if wishes to leave him can do so. A common wife in a polyandrous family after the death of her eldest husband is at liberty to seek divorce from other husbands. For this purpose she has simply to tie a thread with one of the fingers of the deadbody and break the thread. This means that wife has got rid of the deceased as well as living husbands.

Religion

As already stated Islam and Buddhism are the dominant religions in Ladakh region. Islam, as earlier narrated, is quite different from the Islam propagated in other parts of India. The Buddhism travelled to this land in Ashoka's period. But the Buddhism entered into Ladakh through Tibet. Dalai Lama has been their real religious head who is thought to be the reincarnation of Lord Buddha.

Dukpa and Gelgupa are two types of Lamas here. *Dukpa* lamas wear a red cap and head the 'Red Sect of Buddhists'. The *Serpongon* or *Gelgupa* lamas wear a yellow cap and head the 'Yellow Sect of Buddhists'. The Dukpa lamas can lead a worldly life. They can eat meat and drink liquors. Gelgupa lamas lead a life of celibacy and keep away from wine and meat. The saintly lamas devote much of their time in the study of scriptures and meditation. The women given to ascetic order of life are known as Chomos. Chomos and lamas live in separate apartments of Gumphas commonly known as *math* or *vihar* or *Sangharam*.

It has been a tradition in Ladakh to send atleast one son to the math to become a lama. Mostly the youngest son of the family is sent to the Gumpha. A daughter is sent to the Gumpha in case there is no son in the family or the son cannot be spared for ascetic order because of other pressing reasons. The eldest Lama is called as *Kushak* who used to be appointed by Dalai Lama of Lhasa. Lamas are not only the spiritual leaders of the masses but are also priests, teachers, physicians and astrologers for the public. Till recently the lamas also imparted justice to Ladakhis.

In land locked and remote tract of Ladakh, monasteries *i.e.* gumphas have been the main centres of social activity. The famous monasteries are those of Hemis, Shankar, Thiske, Bituk, Chede, Alchi, Trapak etc. The Hemis Kusak was in Lhasa when

in 1955 Chinese occupied Tibet. He had gone for spiritual education there and his fate is still unknown. Kushak Bakula of Shankar monastery was earlier a Member of Parliament and Minister for Ladakh affairs in Kashmir Cabinet.

Besides Gumphas *Chhorten* and *Manis* are the places for religious operations. In *Chhortens* are preserved the last remains (mostly bones) of some significant and reputed personalities. After cremation the bones of the deceased are mixed with wet earth and a ball prepared. These balls are kept beside Buddha's statue in the *Chhorten*. At the beginning and end of every village *manis* have been set up. In a barren and treeless tract like Ladakh the *manis* work as landmarks for the travellers. In Ladakh now one can see some temples, mosque and gurdwaras also. *Lapchas* or religious flags keep on furling over all the monasteries.

Many of the monasteries are now in the state of neglect. Unknown whereabouts of Hemis Kushak and inroad of modern beliefs have adversely affected the faith of many Ladakhis. Consequently one does not find so much of devotion of the masses towards monasteries at present as it used to be earlier. Many of the paintings and other articles of these monasteries have already been damaged. "The world famous fresco paintings on the walls of the Alchi monastery dating back to the 11th century and depicting various scenes from the Buddha's life have been damaged badly by rain."[8]

Pure Aryans

As already narrated purest living survivors of the Aryan race live in some villages of Ladakh close to the Indo-Pak cease-fire line. Fond of salted tea these people live in the apricot belt of that region. The area they live in is quite dry and water is a rare commodity there. Hence these people who procure drinking water with great difficulty do not take bath. They think that if they waste water in bathing operations, God would never forgive them for this sin. Living amid inhospitable mountains they have devised their own methods of combating diseases. During outbreaks of epidemics in the neighbouring villages they close the entry door of their village situated atop a mouthtain ledge on the Indus banks.

These Aryans wear colourful apparel. Both men and women don necklaces, bracelets and ear-rings. As a mark of distinction from other tribals of Ladakh they adorn their caps

8 *Ladakh in ferment-II*, Times of India, New Delhi, November 8, 1975.

with a variety of flowers. Their robes and caps are also studded with coins. These people wear breeches. Like women, men also keep long hair. Some Aryan women present fine specimens of Aryan beauty "These Buddhist Aryans do not use cow milk. They do not eat fowl and hen's egg. Even the use of cowdung is frowned upon. Some of them consider the cow so sacred that they think the use of the produce will be a sacrilege. Some Aryans in Kargil and Durchik say that the taboo is now observed only by women. Men often ignore it."[9] Till recently these people were also polyandrous like the Buddhists of Ladakh and Tibet, but now this tradition is dying out and the race is experiencing a sort of 'population explosion'. It is also feared that consequent upon the inroad of modern fashion of living and mixing of blood the purist Aryan race would one day face extinction.

Way of living

Like all other places in Ladakh also natives are fond of merry making and dancing on all festive occasions. Both men and women take *Chhang* a local brew distilled from barley and *grim*. By taking plenty of this brew they probably want to be in a state of mild inebriation so that they are unaware of their miseries and course of nature. On an average a family consisting of five to six members spends about Rs. 30 per month on Chhang. It is served to guests in Ladakh as tea, coffee or other soft drinks are served to the guests in our towns. In Leh there is a back lane known as *Chhang gali* where Ladakhi women sell Chhang throughout the day. It seems that Chhang has become the part and parcel of Ladakhi culture. Ladakhis are so joyful that even after day's hard toil they start dancing in public through feares. The tourists and outsiders standing nearby are invited to join without inhibitions. This is the most endearing characteristic of Ladakhi culture. Every Ladakhi young or old greets an outsider with *jule*.

Sattu is the staple food of Ladakhis. Sattu is obtained from the barley and grim flour. It is added to tea and drink like gruel. They also take butter tea fondly. Though they are Buddhists yet the Ladakhis take meat. Yak is their multipurpose animal. The animals are not slaughtered but suffocated to death. Mostly cowdung is used as fuel.

Their dress, food and way of living still gives a glimpse of

9 *Ladakh in ferment-IV, op. cit*

their ancient ways. They mostly wear a gown like red coloured robe made of woollen cloth. Over it they tie a belt. This dress is known as *guncha*. They also wear a cap over their heads. The stockings they wear are made from woollens rugs. The shoe they put on is long upto knees and has a sole of leather. The men get the front portion of their head clean shaved and braid the hair on the rear. The women mostly wear a long coat like robe along with shalwar like trousers. The skin of goats is used as a shawl on their backs.

Dancing is known by every one in Ladakh. Men, women and children all know dancing. One who does not know this art is looked down upon in Ladakhi society life. No fair, festival or occasion is thought complete without a befitting dance. Even the bride and bridegroom join the dancing party in a marriage. Devil dance is a special dance of Ladakh. This special dance is performed only by Lamas. Don in colourful robes, they adorn their faces with artificial faces of animals etc. and then dance with naked swords. Some wear cows artificial face and some of deer or any other animal. Some look like lions while some prefer to look like devils. They perform this circular dance to the tunes of some musical instruments.

Ladakhis are not only good dancers but also good artists. The fresco paintings, carvings and rock carved statues are the specimens of Ladakhi art. In ancient times the Buddhist Ladakhis were very fond of preparing Buddha's statues. Some people spent their entire life in preparing Buddha statues. The Buddha statue in lying posture at Mulbekh and a two storey statue at a Gumpha in Leh are unique specimens of Ladakhi art. At a distance of about 12 kilometres from Leh the metallic statue of Lord Buddha is yet another feather in the cap of Ladakhi artists.

"Ladakh may have a rich cultural heritage, but it lacks the scenic splendour of Kashmir. There are out-croppings of rock almost everywhere. The dusty plains are dotted with *Chhortens* (stupas) and *manis* (walls of stones inscribed with Buddhist sermons). Barring small patches of greenery around the banks of the Indus or where water springs exist, the landscape is bare. Yet it is fascinating in a way, especially in moonlight."[10] Now Ladakh has been opened to tourists, so it is hoped that slowly and gradually some tourist spots would be developed.

Ladakh is of immense strategic importance to India. This tract must be developed for better integration as well as vigilance. Kushak Bakula the Buddhist political leader has been advocating

10 *Ladakh in ferment-II, op. cit.*

for a Union Territory status for this tract. In our recent history we have seen that when Haryana was carved out as a separate political unit it ushered in a new era of economic progress. But this instance cannot be a precedent for any other tract. This vast and barren tract with harsh climatic conditions, awe inspiring heights and difficult terrain has its own peculiar problems which cannot be solved by just granting it a Union Territory status. Infact, now in our country the public opinion is opposed to the division of its already existing political units. We have seen recently that in this era of machine economic development has initiated in all parts irrespective of their political status. For the development of Ladakh following humble suggestions are offered.

(a) In hilly areas even motive power is needed for initiating mechanical development. The thermal power generators functioning at Leh and Kargil are insufficient. Moreover the power thus produced costs about Rs. three per unit. Hence it is suggested that fast flowing mountain torrents be harnessed for power. Ultimately the power produced here will not cost more than ten paisa per unit.

(b) Major breakthrough in the field of road construction has already been achieved through the layout of Hindustan Tibet Road and Srinagar Leh road. Now steps should be taken to bring as many villages as possible on the road map of India. With these arteries of trade besides men and material required for development would also travel the new ideas and techniques.

(c) To make people development conscious their out-moded and superstitious way of life has to be changed. For this purpose the lamp of learning and knowledge has to be lighted in every hut. The elders, exert an immense influence on the youngers. Hence unless the elders are enlightened major success will not be achieved. Therefore, it is essential that adult literacy programme is introduced here in right earnest.

(d) Since the villages in this vast region are far apart and scattered, couple of demonstration farms is no solution for the economic amelioration of these poor, backward and ignorant masses. Rather steps should be taken to make every village an experimental centre. The government can send experts in agriculture and animal husbandry with missionary zeal to Ladakh villages. Let those people initiate experiments on the farmers' fields themselves.

(e) Cultural troops from developed areas be sent to Ladakh villages who by their performance should inculcate an urge for better living.

(f) Farmers, students and livestockists from Ladakh be taken to outside areas where they can themselves see the alround progress. On their return they should be asked to propagate and practise the techniques and ways they have experimented at out stations.

(g) Films depicting the evils of poverty and backwardness alongwith contrasting films showing the prosperity and development because of new outlook and modern techniques be displayed at regular intervals in all the villages of Ladakh. This technique can bring about a social as well as economic revolution in the Ladakhi life.

But the agencies introducing these programmes should be sure that they do not infringe upon the cultural heritage. Overnight changes in this tribal, border and sensitive zone are not possible. Instead of thrusting any programme on these people it is better to involve these people in the programme itself. The programmes can be a success only with the active and willing cooperation of the local masses. Hence, it is better to arouse their will to work for better tomorrow.

CHAPTER
9

Travel and Transport

"*Agar Firdos ber rui Zamin ast,*
Hamin ast O, hamin ast O, hamin ast".

If there is a Heaven on earth, it is this (Kashmir), it is this, it is this. The 'Jewel of Asia' and 'Asian Switzerland' Kashmir has been a traditional haunt of lovers of beauty and adventurist travellers. The land with hoary headed snowy peaks, picturesque vistas, green emerald and flower strewn meadows, bubbling streams, roaring waterfalls, luxuriant orchards, verdant vales and majestic hills has been a paradise for tourists since ages. By endowing salubrious climate, scenic beauty and innumerable other gifts the nature has made the Kashmir as 'the Eden of the East' dreaming in loveliness. Because of its magnetic attraction, throughout the world, Kashmir nurtured tourism as an industry much before tourism could secure a place in other parts of our motherland. In fact the state of Jammu and Kashmir has the distinction of being the first state in India to have organised a tourist department. Before the First World War the tourism though existed here was not very much popular. Then the tract attracted only royal tourists, adventurist hikers, trekkers, mountaineers and pilgrims. Only two-wheeled horse-carts plied on the

slender roads of the State. But with the incoming of automobile and road building the number of tourists, foreign as well as Indian, started swelling steadily. After the merger of the state with Free India tourism was developed at a remarkable speed in Jammu and Kashmir. Esteemed Pandit Jawahar Lal Nehru on whose shoulders fell the responsibility of steering newly freed nation's ship besides being a dogged freedom fighter, beloved leader, eloquent speaker, excellent author and far sighted statesman was also a great connoisseur of nature and beauty. Widely travelled as he was he had visited the tourist haunts all over the world. He desired the development of Kashmir as a tourist attraction on modern and scientific lines. He did his best to develop this native land of his forefathers into a delightful attraction for world tourists. Because of the plans initiated by him Kashmir is today vying with almost all the tourist centres on the globe. Kashmir is not only bestowed with natural gifts like snow, flowers, pastures, dales and peaks but man has also favoured this region with his creations. Many mosques, temples, monasteries, forts, historic places and above all the lavishly built Mughal gardens add charm to the landscape. Under the development of tourism the natural as well as man made sites have been improved and provided with modern amenities. The result of all these efforts has been the ever swelling number of tourists to the state. The number of tourists rose from 57,000 in 1964 to 1,60,000 in 1970 and above 2 lakhs in 1976. Besides many devotees reach Vaishno Devi temple and Amar Nath cave who otherwise do not bother for sightseeing.

The Jammu and Kashmir department of tourism maintains its reception centres not only within its own territories but also in big cities like Calcutta, Delhi, Madras, Bombay etc. The department apart from providing general information to the tourists also provides house boats, tourist huts, facilities for games and fisheries, conveyance for surrounding sightseeing, yachting etc. etc.

Health Resorts

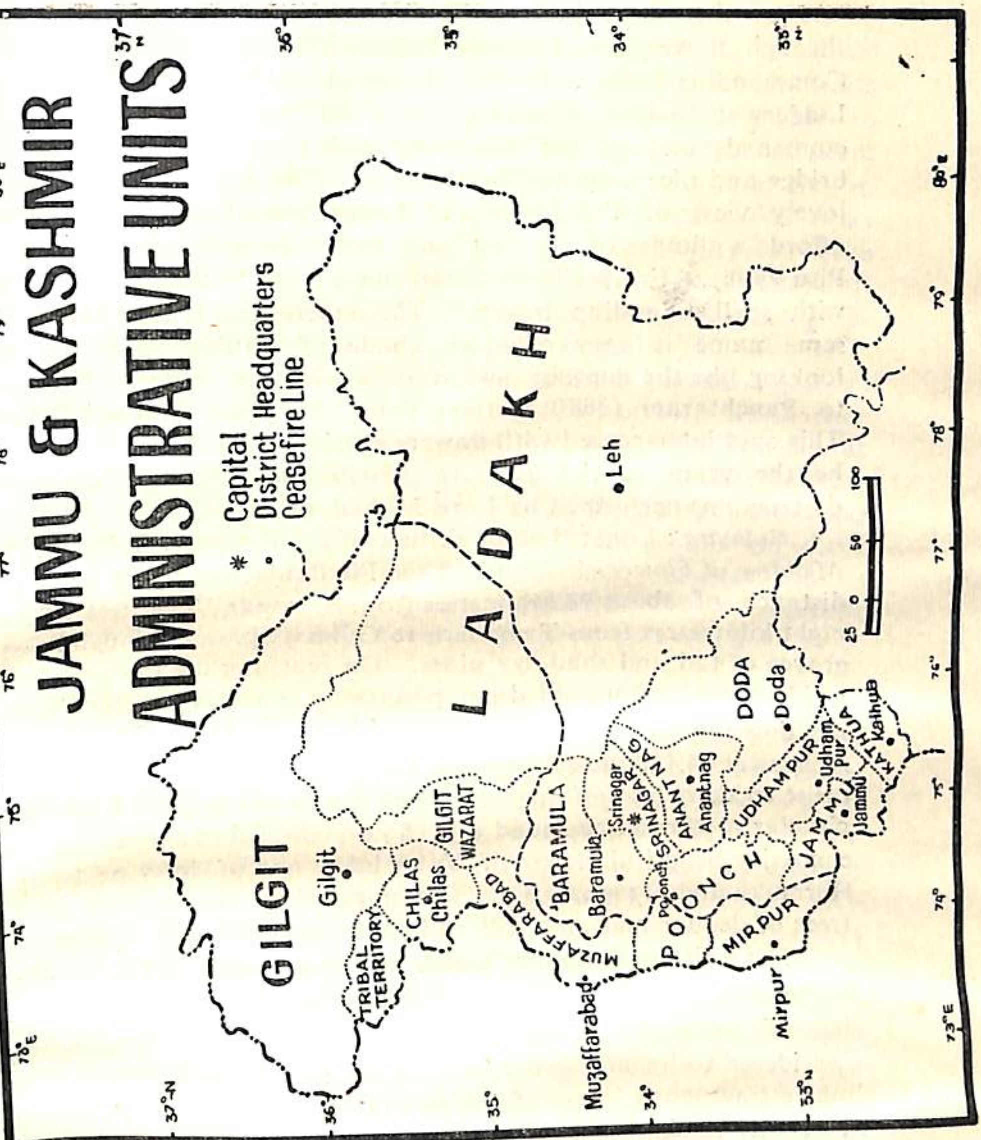
The climate of Kashmir is similar to that of Switzerland till the end of April and similar to that of the Southern France till the end of August. In the blistering tropical summers one finds solace in the Kashmir valley. Tourists who come to the Vale of Kashmir in summers are not contented with the sightseeing in Srinagar only. There are many places in and around the Kashmir valley which throw invitations to the tourists.

Srinagar the summer capital of Jammu and Kashmir occupies the central place on the Kashmir valley nestled in the bossom of the majestic Himalaya ringed with towering snow capped ranges. About 13 to 14 hundred years old, town of Srinagar, spreads on both sides of the Jhelum river *i.e. Vitasta*. The city was founded by the ancient ruler of Kashmir, Pravarsen II. Ashoka the Great also founded a city of *Shrinagri*, but that place was at a distance of about 5 km. from the present site. Because of Jhelum being spanned by nine bridges and its waterways, Srinagar is often linked to Venice. The situation of this capital town on an edge of the beautiful Dal lake and being surrounded by lofty mountains on all sides the city presents a picturesque view. Off the bridges spanning the Jhelum, one was got built by Zain-ul-Ab-ul-Din. This wooden bridge continues to be in use till this day. It is quite rewarding and relaxing to explore the city and its environs in a boat *i.e. Shikara*. One moves up and down the river, pierces through the heart of the city and also passes beneath the *kadals i.e.*, bridges.

Pahalgam a popular health resort is situated about 96 kilometres from Srinagar. Still retaining its primal beauty of a *Village of Shepherds* one finds it covered with fir laden mountains and flower strewn meadows in summer. After completing the journey through saffron clad fields on the one side and twisting and turning streams on the hilly terraces one is dazzled by the silvery and soaring heights of the mountains. The delightful mountainous air, rustic wooden bridges and rolling pastures lend a unique charm to the visitors. The tourist lodges, huts, rest houses and hotels afford comfortable boarding and lodging facilities to tourists. The Lidder which flows through Pahalgam adds to the beauty of the spot. Carrying ice cold waters the stream affords retreats to the tourists throughout the day during summer. The Pahalgam Club is a distinctive feature of this hill station. "Gay in various activities, it is exemplary of the corporate life of visitors, and local people, all of whom contribute their efforts in providing various sports and amusements."[1] A swimming pool, a beautiful park and riding are other attractions for the visitors. Lying on way to Amarnath cave the resort goes agog with life during pilgrimage days.

Aru, Lidderwat, Baisaran, Chandanwari, Panchtarani, Shesh Nag, Tarasar lake, Tulian lake, Kolahoi glacier etc. are other worth visiting places in the vicinity of Pahalgam. Aru (2408 metres) is a picturesque meadow to which one has to pass through

1 Bamzai, P.N.K., *op. cit.* p. 57.


JAMMU & KASHMIR
ADMINISTRATIVE UNITS
Capital
District Headquarters
Ceasefire Line
GILGIT
Gilgit
TRIBAL TERRITORY
CHILAS
Chilas
GILGIT WAZARAT
LADAKH
Leh
MUZAFFARABAD
Muzaffarabad
BARAMULA
Baramula
SRINAGAR
Srinagar
ANANT NAG
Anantnag
DODA
Doda
POONCH
Poonch
UDHAMPUR
Udham pur
JAMMU
Jammu
KATHUA
Kathua
MIRPUR
Mirpur
25 0 50 100

one of the finest hill scenes found in Asia. While passing through flowery meadow one feels as if walking through paradise. Commanding one of the loveliest spots in Lidder valley, Lidderwat besides affording a good camping ground also commands one of the charming sights. Famous for its snow bridge and picnic spots Chandanwari (2996 metres) commands a lovely view of the lofty and hoary mountains all round and affords a glimpse of zig zag and tortuous pathway leading to Pisu valley. From Chandanwari one can go to Sheshnag a place with spell bounding beauty. The emerald coloured like of the same name is very often an abode of shining white glaciers looking like the floating swans on a sheet of water. The trek to Panchtarani (3880 metres) from this place is an uphill task. This spot interspersed with flowers of variegated hues is said to be the venue of the *Tandava Nritya* (the Cosmic dance of destruction) performed by Lord Mahadeva.

Gulmarg : Located at an altitude of 2,650 metres, Gulmarg, *The Meadow of Flowers* is found on the Pir Panjal range. It lies at a distance of about 48 kilometres from Srinagar. The trek of last eight kilometres from Tangmarg to Gulmarg passes through lovely groves of tall and shadowy pines. On reaching the top one finds as if nature has unfolded its panorama on this saucer shaped meadow dotted with tree groves and isolated hills. The Mount Apharwat (4,128 metres) besides throwing challenge to the adventurist trekkers also affords scenic charm to Gulmarg. There is a circular road running round this flower decked meadow and one can enjoy beautiful views of Wular lake and of lofty peaks like Harmukh and Nangaparbat. The murmuring rivulets and shady trees of deodar and pine still add more charm.

The visit to Kashmir valley without a visit to Gulmarg is incomplete. During winters Gulmarg is covered with a thick sheet of snow and becomes a vast stadium for winter sports. Considered to be among the best in the world the Gulmarg golf links attract many lovers of golf in winter. It has also developed as a centre of skating and skiing. Many huts, hotels and lodges provide comfortable facilities of stay to tourists and sportsmen. Gulmarg is also a convenient base for visiting lake Alapathar (3,842 metres), Khilanmarg (3,048 metres) and Tosa maidan. These spots also form winter play grounds when covered with a thick layer of snow during winters. Many people carry their own tents and camp here for a couple of days.

Sonmarg : Surrounded by mountains and strewn with bright coloured flowers Sonmarg (2,740 metres) *the meadow of gold* lies in the Sindh valley at a distance of about 83 kilometres from Srinagar.

The landscape is mantled with fir, pine, silver, birch and sycamore trees. On the other hand the snowbanked reaches on the Sindh enhance the beauty of this place. In ancient past the traders to and from Central Asia wandered at the mighty glaciers and silent lakes of this place and very often camped here. Sonmarg lies on a three kilometre long grassy flat running between the river on one side and hills on the other. The awe inspiring great peaks come closer round the valley whereas glaciers very often stroll down to the camping grounds. The scenery here presents a grandeur and beauty similar to the Alps in Europe.

From Sonmarg as a base one can visit the perennial glaciers at Thajiwas and lakes of Gangabal (3,658 metres), Krishansar (3,810 metre) and Vishansar (4,084 metres). The translucent waters of Gangabal lake flecked with ice-floes at the base of snow clad peak of Harmukh (5,070 metres) present a very attractive view. This spot is Hardwar for the Hindu population of the valley and named as Harmukh Ganga by them. "Apart from its sacredness, the lake is an exquisite turquoise coloured sheet of water reposing immediately beneath the great cliff and glaciers of the Harmukh."[2]

Verinag : Famous for its spring, Verinag is believed to be the chief source of the *Vitasta*, *i.e.*, Jhelum. Legend goes that following the desiccation of the Kashmir valley by gods, Lord Shiva prevailed upon his consort Parvati to appear there in the form of a river. He thrust his trident (*trishul*) in the surface of the earth here and created a hole. The water sprang from this hole in a span or *Vitasta* by which name the river Jhelum was known in the ancient past. The Neelmat Puran on the other hand tells us that Parvati herself expressed the desire to Mahadeva to appear as *Vitasta* in Kashmir and to fulfil the desire of his consort Shiva thrust his trident. In ancient times it was also known as *Nilnag* and was sacred to the snake diety of the same name. The construction of an octagonal base and the arcade round by Mughal emperors added charm to this place. Down the Verinag stream the ruins of Mughal baths and pavilion can still be seen.

Kokernag at the foot of Banihal pass in the Bringhi valley is another peaceful resort. The invigorating climate, spring waters possessing medicinal properties, gardens of Chenars, cascading waters, open countryside and shallow crystal clear river attract many tourists to this place. The jewelled flower garden of roses and trout fishing pools are another charms for the picnickers, visitors and game lovers.

2 Krishna,B., *Jammu and Kashmir* in Illustrated Weekly of India (Dec. 14, 1975)

The Kishanganga and Lolab valleys one finds lovely spots not oft visited by tourists. Now with the widening of road many of these spots have become accessible. The picturesque valleys of Gurais and Tilel west of Sindh valley offer charm and scenic beauty to hikers, trekkers and poney riders. Forest clad mountains, velvety shoulders of the hill and grassy plains by the river side furnish panoramic view to the eyes. Further west in Lolab valley which though lacks the majestic grandeur of Sindh and splendid beauty of Gurais has a sylvan charm un-excelled anywhere. To the adventurist traveller Francis Younghusband Lolab presented "a series of English Woodland glades, with the additional beauty of snowy peaks in the background." Chandigam, Kumbrial, Renawari, Lalpura and Kitardaji are the spots in this valley which offer spell bounding scenes to the tourists.

Jammu the winter capital of the state lies en route to Kashmir. It is said that whatever peace, beauty and charm existed in the Kashmir valley was because of the heroic deeds of Jammu Dogras. "The masculine strength of Jammu provided the peace and security the valley needed in the resurrection of its feminine beauty and charm."[3] The Dogras are still continuing the chivalrous and heroic traditions of their forefathers by their handsome contribution to the Indian army. The city of Jammu is worth seeing. The Raghunath temple attracts many visitors and pilgrims every year. The pilgrims going to Vaishno Devi halt here for visiting the town that finds oft repeated references in history.

En route to Srinagar one can visit beautiful places like *Kud*, *Batote* and *Sanasar*. Situated at a height of 1,730 metres above sea level amidst picturesque surroundings on the sunny and open western slopes of the Patni range Kud commands a distant but panoramic view of the plains down below. With its bracing climate the spot is a hill station for many people of Jammu and Punjab plains. Further up, crossing over the Patni top Batote is located in the midst of pine and fir trees. The place overlooks a deep ravine at the bottom of which flows the river Chenab. The spot also faces the splendid view of the towering hill ranges over the Chenab valley. Because of bracing and salubrious climate Kud as well as Batote have been sanitoria.

Bhadarwah and *Kishatwar* are two other beauty spots not often visited by tourists. The road leading to these two stations branches off from Batote. Bhadarwah is located in a terraced valley the other end of which is guarded by Padri pass. One of the most beautiful places of the state is located here. Flanked by

3 *Ibid.*, p. 21.

Vale of Kashmir, Ladakh and Himachal Pradesh the valley is very often compared with the Black Forests of Germany and Highlands of Switzerland. A Kashmir in miniature Kishatwar is popularly known as *Chhota* (little) *Kashmir*. The scenic charms of Kishatwar are matchless in many respects. A vast grass covered plain stretch serenely nestles amidst steep mountains whereas the Chenab rushes down below in all its fury. Saffron is grown at Kishatwar next to Pampore in the Kashmir valley. No other place grows saffron in the entire valley.

Mughal Gardens

Nature has endowed Kashmir with numerous gifts. The beauty and pleasure loving Mughal Emperors in their own way contributed by way of laying terraced gardens to the otherwise land of grandeur and beauty. These gardens when in full bloom act as irresistible attraction both to the energetic tourist cum adventurist traveller and seeker of quiet and solitude. With their scheme of terraces, fountains, cascades and shady trees the gardens have also added to the architectural wealth of the valley. All prominent Mughal kings with the sole exception of Aurangzeb were lovers of green beauties. Akbar is said to have laid down the Nasim Bagh. The Nishat, Shalimar, Achhabal and Verinag are the creations of Jahangir and his art loving queen Nur Jahan. To Shah Jahan the Great Mughal Builder we owe many improvements in the existing gardens. He added a few more terraces to Shalimar and further beautified the gardens at Achhabal and Verinag.

The Spring dawns a thick mantle of green vegetation in these gardens. The blossoming flowers add perfuming odour to the breeze. The little plants and stems which wore a deserted look earlier put forth buds and blossoms of variegated hues and colours. The branches and twigs which had earlier carried an almost dead look now start stemming out new leaves and branches. The rustling leaves throb with life and soft blowing breeze echoes a whispering sound. The dancing boughs become a twittering and twidling ground for sparrows, warblers whereas the butterflies frolick on the flowers. It looks that the gardens which were lingering under a sound slumber have woken up and have started pulsating and beating with the life of smiling and playful nature around. The sweet scented herbs add an aroma to this throbbing environment.

Chashmashahi : Gushing out of the spur of a hill the *Royal Spring* or Chashma-Shahi gives the name to the garden that

adorns it. Smallest of all the Mughal gardens in Kashmir it consists of a spring that rises from the base of Zebanwan mountain and enclosed in a lotus shape carved stone frame work. The crystal pure water of the spring is reputed far and wide for its highly prized mineral-curative properties. Ali Mardan Khan the Mughal Governor of Kashmir laid it as advised by Shah Jahan the Mughal Emperor. Shah Jahan planned it parallel to the Nishat though on a small scale. From its lofty heights the garden commands a panoramic view of the Dal lake. "In early spring and summer, when the slopping hill-sides around are covered with a flaming gold of rape-seed fields, when the flushing snows on the high peaks are melting slowly, when masses of trailing clouds float under the blue dome, and when the vast grounds of the Chashma-Shahi and the Hari Parbat Hill are covered with a silvery glistering mist of almond flowers, the visitor is entranced with an unparalleled ecstacy."[4]

Nishat Bagh : Garden of Pleasure or Delight, Nishat Bagh is the biggest Mughal garden in Kashmir. The garden was laid out by Asaf Khan the Kashmir Governor in Jahangir's reign and empress Nur Jahan's brother. The whole garden is divided into twelve terraces which are equal in number to the signs of Zodiac. Alternately known as 'Garden of Terraces' the Nishat Bagh is crossed by a water channel. The water falls in swift but gentle torrents from one terrace to another. The last terrace is surrounded by a wall and encloses the *Zenaina* or a private terrace for the royal harem. From the topmost terrace one catches a full view of the Dal lake. All the terraces are laid out with artistically planned flowers, ornamental trees of Chenar and Cypress. The cascades, fountains, tender and green velvety lawns lend a unique charm to the garden.

Shalimar Bagh : Like the Taj Mahal of Agra the Shalimar Bagh of Kashmir was also born out of Emperor's love for his beloved. Though not a memorial, the Mughal Emperor Jahangir built *the Abode of love* or Shalimar Bagh for his beloved Nur Jahan. It has a quardilateral shape and is divided into three parts. The outer part containing a pavilion and used by Jahangir for his audience was similar to *Diwan-e-Aam* of Mughal buildings. The second part was exclusively used by the Emperor himself similar to the *Diwan-e-Khas*. The third part with black marble pavilion still glistering was reserved for the Empress and ladies of the court. There is also a water channel passing through this garden. The water of this channel falls as sheets into basins studded with fountains. The ornamental trees, cascades and

4 Kaumudi, *op. cit.*, p. 179.

flower beds lend the whole scene a charm of its own. Giving a fragrance of freshness the Shalimar is the most popular picnic spot and differs from the Nishat. "While in Nishat one senses the joy and buoyancy of nature, at the Shalimar one feels the awe and majestic beauty of scenery around."[5] One side of the garden is splashed by lake waters whereas the other side is commanded by a hill. The garden is linked with a 1·5 kilometre long canal which is used as a waterway by the tourists and Kashmiris to reach the Shalimar bagh. The garden at the base of Mount Mahadev hums with activity during the tourist season. It is said that the plan of this garden was prepared by Nur Jahan herself.

Naseem Bagh : The Naseem bagh or the *Garden of Bliss* was got laid by Akbar after he completed the construction of Hari Parbat Fort. Naseem is not a garden in the strictest sense. A huge expanse of high ground has been decked with soft emerald turf and thick entangled Chenar trees have been symmetrically planted at short distances. There are no flowers, no orchards, no fountains, no cascades and no water channels like other gardens of the Vale. It is a vast grassy lawn where outings can be arranged to enjoy the unadorned beauty of nature around. Many visitors pitch their tents in Naseem Bagh and enjoy the delightful spectacle all-round.

Achhabal Bagh : Like Chashma-Shahi, the Achhabal was originally a spring in natural surroundings. This beautiful place became a summer haunt of Jahangir and Nur Jahan. Shah Jahan's daughter Jahan Ara at a later stage selected this spot for the construction of a garden. This is again a terraced garden. The terraces are covered with flowers. Quiet and calm Chenar groves and fruit trees adorn these terraces. In some respects the Achhabal is "even lovelier and more enchanting than the Nishat or the Shalimar. For, while the latter are situated close to the gaiety and glamour of city life, the Achhabal represents the beauty of nature in her lonely mood."[6] The trout hatchery is also maintained by the government here.

Verinag : Verinag is a village located at the foot of the Banihal pass. The famous spring of Verinag is reputed as source of the Jhelum. Jahangir got an octagonal tank built here whereas a garden in the close vicinity was got constructed by Shah Jahan. A gushing stream carrying the water from the spring passes through this garden. The nearby Chenar shaded spot

5. *Ibid.*, p. 180.
6. *Ibid.*, p. 182.

offers a camping site for those who seek solitude and respite. In one of the arches of the garden a Hindu Temple is located.

Religious Places

Kashmir which makes man to wonder at the greatness of Almighty God is the Temple of God in the truest sense. Quite close to the nature man fully understands the meaning of 'God is Nature and Nature is God'. For ages man has been building temples and mosques as places for his worship. In recent years Gurdwaras have also sprung up in many parts of the state. These religious places apart from being places of sanctity also present immense natural beauty in their surroundings. Many such places are visited by pilgrims every year.

Amar Nath Cave : The celebrated cave of Amar Nath is located in a long glacial gorge at an altitude of 3,880 metres above sea level at a distance of 45 kms. from Pahalgam. The self formed *ice lingam* waxes and wanes with the phases of moon. The journey to Amar Nath is not only difficult but adventurist too. The full view of the ice lingam can be had on *Shravan Purnima* i.e. full moon in August every year. The caravan of pilgrims along with medical, police help and day to day needs starts from Pahalgam three days earlier. The last 35 kilometre journey passes through a mountainous region destitute of human habitation. There are no trees even to afford shelter and for fuel even only juniper can be had. Now the government have no doubt provided sheds at some places yet the pilgrims travel in caravan as very often the snow storms and snow blizzards can cause havoc to travellers. The caravan is preceded by the priests and *sadhus* (saints) carrying the Holy Mace of Shiva. The chief characteristic of this pilgrimage is that the caravan encamps in the open ground wherever night falls. After Pahalgam Chandanwari is the first halt in this journey. Here the Liddar river is negotiated through an ice bridge which continues to be serviceable even throughout the summer. The second and final halt is normally exercised at Sheshnag. On reaching the Amarnath cave the pilgrims have a glimpse of the self formed *ice lingam* which waxes and wanes with the phases of moon. The cave is quite large and the water percolates drop by drop at many places inside the cave. But the drop that falls on the *Shiva Linga* condenses instantaneously. This process continues throughout the *Shukla Pakhsha i.e.* bright phase of the moon. On fullmoon the *ice lingam* is complete. Thereafter the lingam starts melting drop by drop. This waning process now continues

throughout the *Krishna Pakhsha i.e.* darker phase of the moon. Ultimately on the *Amavasya i.e.* new moon the lingam completely disappears. On *Shravan Purnima i.e.* Fullmoon of August the ice lingam assumes a height of 80 to 85 centimetres. It is on this day that thousands of devotees visit this holy cave. The legend goes that Lord Shiva explained the secret of salvation to his consort Parvati at this place on a fullmoon night. Two of Shivas servants overheard the explanation and were turned into pigeons. According to common belief these two pigeons are seen flying when the devotees gather here in thousands. The origin of this pilgrim is lost in antiquity but *Rajatarangini* refers to this practice being continued even before 1000 BC.

Vaishno Devi Cave : Over four lakh devotees visit this shrine situated at a height of about 1,829 metres above sea level. Though the pilgrimage continues throughout the year yet on *Navratras* (early October and early March) the cave attracts a huge rush of its devotees. The road to Katra (a base) bifurcates from Domel on the Jammu-Srinagar highway, about 32 kilometres from Jammu. The shrine of *Shri Trikuta Bhagwati* popularly known as *Shri Vaishno Devi* is located in a natural cave. With a narrow entrance the cave has a length of about 33 metres. A knee deep *nallah* (rivulet) which the devotees have to wade through flows out of the cave. The origin of this holy pilgrimage is shrouded in mystery. According to one legendary narration the goddess Vaishno Devi usually stayed at a place Adkanwari. The Demon *Bhairo* wanted to marry her forcibly. He chased the goddess, who ran all the way from Adkanwari to the cave where she took shelter after killing the demon. A big stone lying outside the cave is told as the petrified body of the Demon.

Khirbhawani : The shrine dedicated to Ragina Devi or Khir Bhawani is situated in the village of Tulmula at a distance of 20 to 22 kilometres from Srinagar. The goddess is believed to have been brought by Hanuman, the Monkey General of Shri Ram from Sri Lanka. The temple lies in a picturesque scenery. "The temple has a spring the water of which exhibits a strange phenomena of a change of colour according to the season and time."[7] The local populace is of the belief that during days of turmoil and danger the water of spring turns to be blue, otherwise during days of quiet and calm the water gives a purple hue. The ancient Sanskrit scripture *Rudramala Tantra* contains a psalm *Ragina Kavach* praising the goddess and proving the ancient origin

7 Kaumudi., *op. cit.* p. 127.

of the shrine.

Shankaracharya Temple : On the shore of Dal lake Shankaracharya hill or formerly known as Gopa or Gopadri hill crowns the landscape. There is a temple on this hill believed to have been built about 2000 years ago. The temple devoted to Shankara, the great monist Shaivite teacher was originally built by king Gopaditya and was known as *Jyeshthevar* in ancient past. Later a Shaivite temple sprang up here. "The temple with its massive octangular structure in stone and enclosed walls, when floodlit at night, stands as a solitary figure overlooking the city of Srinagar, with the city's long narrow groves of white poplars leading to its main gates. Shankaracharya is the highest point visible from afar to a visitor approaching the capital city."[8] The mountain shrine looks like a sentinel permanently and steadfastly guarding the valley.

Hari Parbat : There is a hill inside Srinagar itself. This hill is known as Hari Parbat. Since time immemorial the Hindus of the valley have considered it as a sacred abode of the goddess *Kali*. There is a fort at the top of the hill, the enclosure wall of which runs for five kilometres with a height of about nine metres. This wall was got erected by Akbar the Mughal Emperor in the year AD 1586. The fort is accessible through a number of gates which are unique specimens of archeology. In Akbar's times there was a cantonment below the hill. Besides the temple there is also the Mosque of Akhan Mullah Shah got constructed by Shah Jahan's son Dara Shikoh for his teacher Akhan Mullah Shah.

Hazratbal Shrine : The most important religious site of Muslims in India lies in the form of Hazratbal Mosque on the bank of Dal lake. The shrine has acquired special sanctity because of its being the repository of a sacred hair of the Prophet Mohammad. This hair is displayed to the public on the birth day of Prophet and similar occasions when thousands of Muslims gather here to pay their homage. The sacred hair was said to be in the possession of Sayyad Abdullah, a descendant of the Prophet's Shrine in Medina. He came to India in AD 1634 and lived at Bijapur (Deccan—now Andhra Pradesh) for about 23 years. Khwaja Nur-ud-din Madanish brought this sacred hair to Kashmir. For some time the holy relic was kept in Khanaquah of Naquishband Sahib and finally transferred to Hazratbal Mosque; which was originally built by the Mughal Emperor Shah Jahan. Commanding a beautiful view of the Dal lake the shrine is attended by a large number of Muslims on Fridays for prayer.

8 *Ibid*, p. 130.

Shah Hamadan Mosque : While going down the river Jhelum in a ferry or a boat one is attracted by a large wooden structure near third bridge. This massive wooden building is known as Shah Hamadan Mosque. Mir Sayyad Ali alias Shah Hamadan, a Muslim saint and preacher came to the valley from Persia in the times of Sultan Qutab-ud-din. The credit of practically establishing the Islam in the Kashmir valley goes to this saint. The mosque was founded by Sultan Qutab-ud-din and was expanded and completed by Shah Sikandar. In the year AD 1731 the mosque was badly burnt in a fire but was practically rebuilt by Abdul Barkat Khan. Since then it has gone under repairs many a time. The main hall of the mosque carpeted by costly carpets is worth a visit. The huge chandeliers hanging from the ceiling give a glimpse of Kashmiri art of carpentary. It is said that a spring sacred to the goddess Kali lies under this mosque. Because of this reason the Hindus worship Kali here on the bank of the Jhelum.

Jama Masjid : Sultan Sikandar got built the Jama Masjid in AD 1404. The mosque lies east of Shah Hamadan Mosque. This impressive building has a roof with four surrounding cloisters supported by two rows of pillars. The mosque has been destroyed in many a fire, that engulfed the city, but it has been rebuilt and repaired many times also. So much so that Mughal Emperors Jahangir and Aurangzeb also got it rebuilt in AD 1479 and AD 1619 respectively. This commodious mosque is beautified by the Chenar trees, said to have been got planted by Mughal kings.

Charar-i-Sharif : About 30 kilometres away from Srinagar en route to Yusmarg, lies the *Ziarat* (mausoleum) of the famous Sufi saint Shekh Nur Ud-din popularly known as Nand Rishi. He is venerated till this day in the valley both by Muslims and Hindus for upholding communal amity and brotherhood of man. During autumn months a week long fair is celebrated here when thousands of devotees pay their homage to the Great Soul From a distance the *Ziarat* gives a view of an Italian monastery. All the walls of the building carry very intricate and complex carved woodwork. A building in the close vicinity also houses the holy relics of the Rishi. The small town itself is known for its basket making, *kangri* making and weaving industry.

Mattan : The sacred place of Mattan is situated about 62 kilometres from Srinagar. The temple at Martand dedicated to Lord Shiva and built by the famous warrior King of Kashmir Lalitaditya lies on a *Karewa*, now in ruins. The temple at Mattan is dedicated to Vishnu. Joneraj the famous Kashmiri historian ascribes the destruction of this temple to the iconoclast ruler

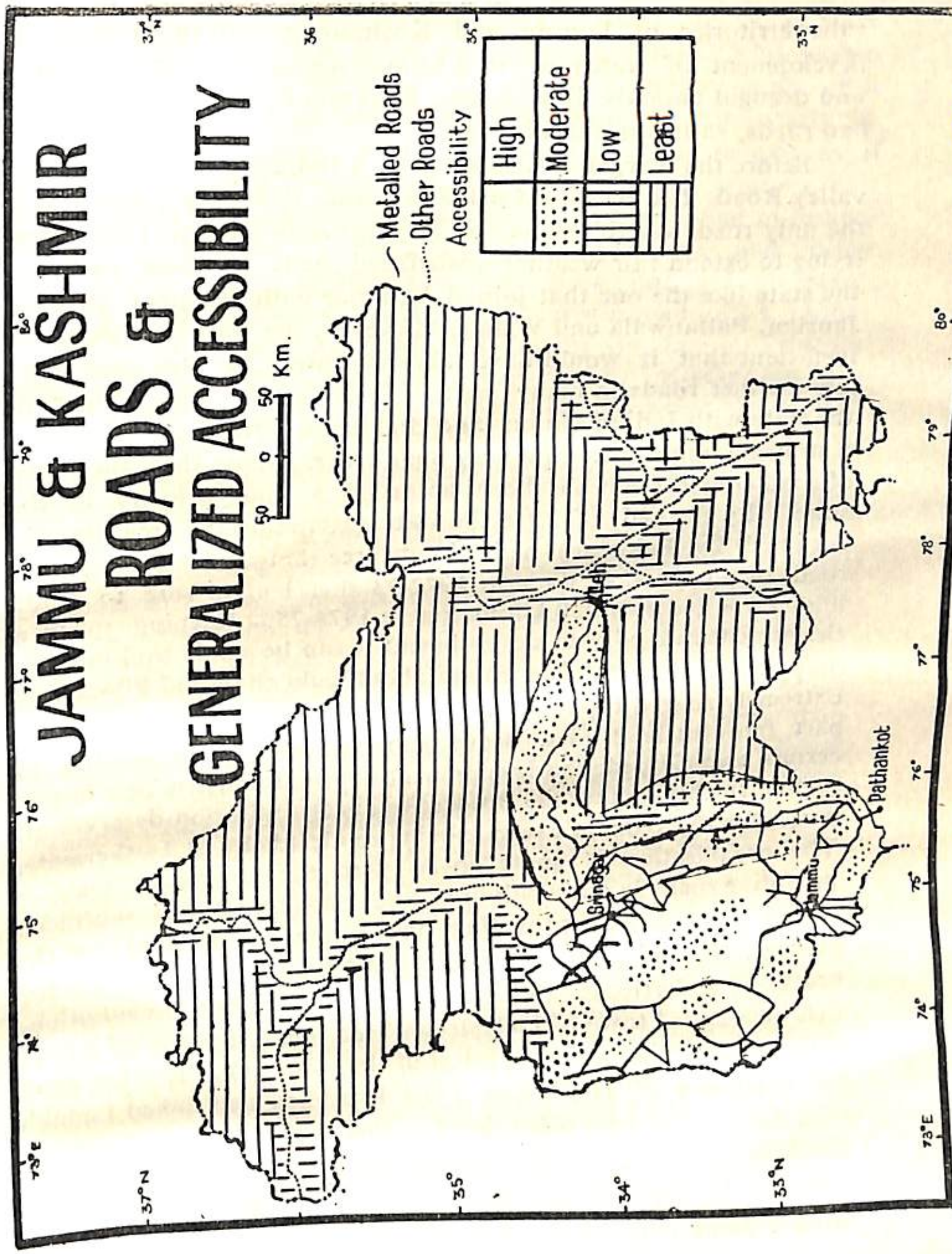
Sultan Sikandar. There is a holy spring near this temple. During certain months of Hindu Leap year, *Shradha* ceremony is performed by many Hindus in the sacred memory of their departed relations. According to Hindu superstition, the *pind dan* ceremony of the persons dying on cot has to be performed at Mattan. The garden near the temple offers a good place for respite to pilgrims.

Besides, the Gurdwara Chhati Padshahi, All Saints Church, Roman Catholic Church, Bijbihara temple, Bumazur temple, Mamaleswara temple, Aishmuqam Ziarat are other religious places worth a visit. The Purmandal shrine near Jammu, Lamayaru and Hemis Gompa monasteries in Ladakh are also visited by numerous devotees every year.

TRANSPORT

The movement of men and material from one place to another place is termed as transport. Men, pack animals, carriages, carts and automobiles are the different means of transportation. Transportation is the life and blood of human existence. Speedier and efficient the means of transport better is the economic development of that area. The diverse relief features and varying climatic conditions lead to a variety of means of transport right from man himself to the most modern and sophisticated mode of air transport in Jammu and Kashmir. In many parts of the mountainous tract especially Ladakh and inaccessible parts of the Himalaya man still is the beast of burden. Yaks and goats render a helping hand to man in carrying loads in many parts. So much so that till the first half of preceding century there was no wheeled traffic in Ladakh. Goods were generally transported by riding and pack animals. Horses and mules though very useful beasts of burden could not be carried to all places. At difficult and narrow places the sturdy Ladakhis carried the goods on their backs. On the higher elevations and snowy passes Yaks proved to be useful and excellent goods carriers.

At present though roads have treaded into many parts of the state and railways have also linked the state's winter capital with other parts of India yet there are many such remote corners where man has yet to welcome the arrival of automobile transport. On rising plains and undulating slopes still sledges like wheel-less carts are deployed for carrying goods. Bridle paths are found in many mountainous parts. In the Kashmir valley Jhelum river is used as an inland water way. Conclusively it can be said that,


JAMMU & KASHMIR
ROADS &
GENERALIZED ACCESSIBILITY
Metalled Roads
Other Roads
Accessibility
High
Moderate
Low
Least
50 0 50 Km.
Srinagar
Jammu
Pathankot

"the territories of Jammu and Kashmir are still in all stages of development of tran port from human agency (porters), to pack and draught animals like mules, donkeys, horses, bullocks, yaks and roads, railways and airways."[9]

Before the merger of this state with Indian Union the Jhelum valley Road, The Banihal Cart Road and the Gilgit Road were the only roads worth the name. The princely administration was trying to extend fair weather unsurfaced roads in some parts of the state like the one that joined Akhnoor with Bhimber through Jaurian, Pallanwala and Watala. However, the work was slow and inefficient that it would have taken centuries to take even these fair weather roads in many parts of the state. The merger of the state with Indian Union and Pakistani attack gave the state a strategic importance of a very high order. Since then the work of road construction has been accorded a high priority in the state. By the end of 1956 the state (excluding the area illegally occupied by Pakistan) had about three thousand kilometres of roads of all types. In the year 1972-73 this length rose to 6,733 kilometres and to 7,230 kilometres in 1974-75. Keeping in view the present rate of road development it can be safely said that the road length has reached round about eight thousand kilometres. Extremely rugged topography, a thick forest cover over a large part, frequent landslides, heavy snowfall and inaccessibility of certain areas impede the development of road construction in this region. In this context the Border Roads Organisation deserves all praise for the yeoman's service being rendered by it to the state. The organisation is going ahead with the Herculean task of providing roads in a difficult area like Ladakh. It has sacrificed atleast one life for providing one kilometre of road on the average. The memorials raised at many points speak of the bravery and fortitude exhibited by the men of this organisation. Leh the capital town of Ladakh has been linked by way of a road with Srinagar the summer capital of the state. On the other hand the extension of Hindustan Tibet Road has also linked Ladakh with Simla. But very often during rains and snowfall the roads are blocked in the state. Maintenance of roads is a difficult problem because of the nature of terrain, snowfall and heavy rains in some parts of the state. The limited width of the roads also hampers the work.

It is estimated that the state has about 3·3 kilometres of roads (including the fair weather and jeepable roads) for every hundred square kilometre of its area. Only about 60 per cent of

9 Raina, A.N. *Geography . . ., op. cit.*, p. 135.

the entire road length is surfaced in the state. If we exclude Ladakh then in rest of the region a road length of 15 kilometres comes to the share of one hundred square kilometre area. But even the meagre road length in the state is quite unevenly distributed. A look at the road map of the state reveals as if the entire road length is concentrated in the south western part of the region. About 90 per cent of the roads are found in Jammu region and Kashmir valley. To avoid accidents and other mishappenings load restrictions have been imposed on many sections of the highways. A truck can carry a load of 7·5 tonnes on the Pathankot-Jammu road, 5·8 tonnes on Jammu-Srinagar road and only 4·5 tonnes on other routes. Mostly one way traffic is allowed in the hilly areas and this raises the cost of transportation.

Water transport has been quite important in the Kashmir valley since ancient times. But water transport is limited to Jhelum river between Khandbal and Baramulla since the river is navigable between these two points only. Normally four kinds of boats are plied on this waterway. *Shikaras* are used for carrying passengers, mostly tourists from one place to another. These small boats can carry seven to ten persons at a time. *Doongas* or bigger Shikaras are used as residential boats in which people live permanently. The Doongas can house more than fifty persons. The boats more popularly known as house boats fitted with modern facilities are hired by the tourists for living purposes. *Khoch* and *Bahachh* are flat bottomed boats used for transporting heavy and bulky goods like coal, bricks, clay, timber, limestone, firewood and construction material.

In pre-merger days the foot-hill town and winter capital of the state *i.e.* Jammu was linked with Sialkot (now in Pakistan) by way of railroad. In the wake of Pakistani aggression in 1947 this link was cut off and most of the railway line was used for constructing huts by the refugees migrating from Devah-Watala tract in this otherwise flood prone area. On the other hand the Amritsar Pathankot rail route was extended to Kathua. Only about six kilometre rail road thus fell into the state territory. But now the winter capital, Jammu has been linked with Pathankot by way of a broad guage railway line. Now trains directly reach Jammu from metropolitan cities like Delhi and other important commercial centres like Howrah, Bombay and Madras. There are plans to extend this rail road to Udhampur. Besides, air service is available to civilians from Pathankot, Chandigarh and Delhi for Jammu and Srinagar. The Satwari (Jammu) and Damodar Karewa (Srinagar) airfields

have been developed to receive regular air service. In rainy season as well as winter many air flights to Srinagar are, however, cancelled in view of inclement weather. The Ladakh air field is mainly used for military purposes.

The State Transport Undertaking maintains a fleet of about 600 buses and 800 trucks. About thirty station wagons have also been maintained by the fleet. The buses besides plying within the state frontiers also reach the important towns of the adjoining states. Pathankot serves as the main trans-shipment centre for goods as well as passengers. Therefore, there is a very quick and regular goods as well as passenger traffic between Jammu and Pathankot. Buses and trucks also link Jammu with Amritsar, Jullundur, Ludhiana, Chandigarh and Delhi. The buses and trucks ply over about 160 routes within as well as outside the state. The buses cover about nine thousand kilometres daily and transport about 112 lakh passengers annually. About 25 lakh quintals of goods are transported every year by the state owned goods carriers. The State Transport Undertaking provides employment to about five thousand persons.

Keeping in view the sight seeing importance of this tourists' paradise state as well as the location of many pilgrimage centres the transport facilities are scanty. No doubt taxis and station wagons are run by many private owners and tourist departments yet these costly means are beyond the reach of a common man. During *navratra* days when thousands of devotees visit the Vaishno Devi Temple the pilgrims have to face many hardships. Now in spite of the railway service extended upto Jammu the situation has not eased in the buses. As a result of increasing population the number of tourists and devotees to Vaishno Devi temple and Amarnath cave is increasing progressively. It can be verified from the fact that number of tourists to the state and pilgrims to Vaishno Devi temple have swelled from 1·19 lakhs and 2·31 lakhs respectively in 1966 to 1·9 lakhs and 6·20 lakhs in 1975. To cope with this rush it was beyond the means of the state government to provide transport facilities. Moreover the state has to run its vehicles throughout the year whereas the rush of tourists and pilgrims is only seasonal. Still government is doing its utmost to provide better services and amenities to its own people and visitors. But the colossal problem now facing not only this state but by the entire country is the result of population explosion. Hence many of our problems cannot be solved and our efforts would go in wilderness until and unless we check our population, and bring our growth rate to almost zero.

CHAPTER

10

Problems and Prospects

Like many other hilly regions the state of Jammu and Kashmir is one of the least developed states in spite of the fact that the region is potentially very rich. No doubt because of undulating terrain the agriculture of the state cannot be developed to the extent it can be developed in the plain areas yet some fruitful achievement can be gained. Forests, horticulture, water-power, tourism and sheep breeding await the opportunities for development. Green pastures and meadows and traditionally acquired skill in handicrafts and arts can work wonders if properly utilized. It is accepted that in the feudal regime every thing depended upon the whims of the rulers but why could the state not develop in democratic set up. The reasons are not far from the comprehension of all of us. Immediately after the merger of the state with Indian Union the state became an arena of foreign aggression. Thereafter many foreign nations started taking vested interest in different parts of the state and the clashing interests hindered the economic development of the state. "The American interest in Gilgit, the Chinese interest in Aksai Chin and the changing policy of the Soviet Union, particularly in respect of Pakistan, and, above all, the Pakistani interest in Kashmir, all are responsible for the

present malaise and instability."[1] The frequent Pakistani infiltration, the prolonged first aggression by Pakistan in Kashmir, two subsequent Pakistani aggressions and China's unprovoked invasion all combined to produce instable socio-political atmosphere in the state, most unconducive for economic development. On the other hand some of the policies followed by us also were not conducive for self reliant growth. For example, "there seemed no rationale in providing subsidised food to the state for the last so many years without determining the poverty line. Consequently the rich and poor have been provided with food at the same rates resulting in an abrupt increase in the standards of living of a limited section of our people and widening the gap between the rich and the poor."[2] Planning is not a one sided traffic but it is a joint enterprise of the people and government. Therefore government cannot be entirely blamed for the slow speed of development in Jammu and Kashmir. The state has vast areas covered with green grass and pastures. This natural source if gainfully exploited is sufficient to support a large number of sheep and goat. This can stop the import of wool and instead the state can export large quantities of wool after meeting its own requirements. Similarly the state is rich in forest wealth. But for a long time the forests were not properly and scientifically preserved and exploited. On the other hand many of the forests were ruthlessly exploited after 1947. This not only resulted in the wasteful exploitation of rich resource but also led to the menace of soil erosion in many parts. The mighty streams of Ravi, Chenab, Jhelum and the Indus pass through the territory of the state but no appreciable achievement has been attained in the field of water-power and irrigation. Once the water-power is developed to an optimum level and all possible cultivable land is brought under irrigation facilities the entire economy would be revolutionised and it would emerge as a surplus state instead of being a deficit state. But the people did not pay the required attention towards the optimum and scientific exploitation of natural resources because they were getting food and other necessities of life. What an irony, a state in which free education was provided to all rich and the poor is one of the least literate states of our country. This speaks of the interest the people of the state have taken to ameliorate their own lot and develop their home state. "Government cannot accomplish any programme successfully without the co-operation of the people.

1 Riana, A.N., *op. cit.*, p. 389.
2 Bhat, Sultan Mohammad, *Planning in Jammu and Kashmir* in *Ma'n Stream* (New Delhi) Aug. 28, 1976.

The urge for development, accompanied by consistent efforts and determination, must begin within the minds of the people, which, unfortunately, is lacking in our state. Economic development should not be considered as solely a state obligation, but rather a joint venture. We must realise that both men and material make a nation great. If people demand both subsidised food and rapid economic growth then the government can in no way realise the broader objectives of planning."[3]

Now when an era of democracy, self reliance and rapid economic progress has started over the entire length and breadth of our country the following steps can lead to a balanced and rapid development of the state.

First of all education must be spread in all parts of the state. A well read and wide awake people can only have an urge and desire for development. The mere opening of schools and colleges is not sufficient. Compulsory education must be enforced with an iron hand and every school age child must be enrolled in the schools. Stringent steps should be taken against the parents who send their school age children to work in the orchards, farms or fields instead of sending them to the schools. Similarly those who employ such children should be punished. For the grown ups who are already gainfully employed the adult education scheme and scheme for continuing education should be started. In this direction the evening institutes and postal courses can go a long way. Unless every farmer, factory worker, housewife and labourer is mentally awakened through a purposeful education we cannot hope to get a fuller and spontaneous as well as voluntary co-operation in the state efforts for overall development. The sphere of vocational and technical education should be widened. In a state where farms, orchards, forests, water and mineral resources can give a better dividend the education must be technically oriented.

In a state where remoteness, inaccessibility and isolation stand in the way of speedy development, net of lines of transportation and communication must be widened and strengthened. The easy and cheap means of transportation are a sine qua non of economic development. In this respect the Border Roads Organisation is doing a commendable work but that is not sufficient. People must link their villages through self help by way of roads. The government can provide them the entire infrastructure but the manual labour shall have to be provided by the people themselves. The railways have made a start and

3 *Ibid.*

now the winter capital of the state stands linked with the rest of the country by way of railway. But the net must be spread in other parts of the state. In Switzerland, a mountainous country the railways negotiate the hills upto a height of about 3400 metres above sea level. Steps should be taken gradually to take the railways to this height. Beyond that ropeways and trolly-ways can be provided because huge bridges cannot be constructed at every step. It should be remembered that the natural resources like minerals, water-power, forests etc. cannot be fully tapped unless there is a well developed system of transportation.

There are many fertile valleys and river terraces capable of being put to cultivation provided means of irrigation are made available in an otherwise area of erratic and uncertain rainfall and prolonged dry periods. Many streams flow on the land of the state. No doubt the undulating nature of the land does not permit the excavation of gravity canals but the state can take a recourse to lift irrigation. In this field the state of Haryana has done wonders and it should not be difficult for the state of Jammu and Kashmir to initiate lift irrigation schemes. These streams while passing through mountainous terrain make waterfalls at many places. Water-power must be harnessed at these places. The mountainous countries like Japan, Norway and Sweden have revolutionised their economies by harnessing water-power. Water-power once developed is quite cheap and this water-power can be employed in the pumping sets to be installed in lift irrigation schemes and running ropeways etc. Hence the authorities must pay special attention towards the rich potential water-power resource. Side by side fish culture can also be practised in the reservoirs created by way of weirs. Apart from providing a protein rich food the fish would also become a source of earning for the state.

When the water is made available at every piece of land fit for cultivation steps can be taken to improve upon agriculture. Old and outmoded agricultural practices must be replaced with modern and scientific methods. Quick maturing varieties of food grains and other crops must be developed for areas with short growing season. It has been observed that the states with agricultural universities have taken a lead in the field of green revolution. Punjab and Haryana have become the parts and parcel of the Indian granary. It is noteworthy that these states attained agricultural affluence only after the establishment of their agricultural universities. Hence there is a need of such a university with a horticultural bias in the state of Jammu and

Kashmir. The results achieved in other universities cannot be straightway applied here. These universities carry on their research programmes suited to the typical soil and climatic conditions prevailing in a certain region. The agricultural university at Hissar carries out its programmes keeping in view the arid climate and sand infested soils of Haryana. Naturally the methods, seeds and practices to be followed in a hilly state with different climatic conditions shall have to be developed anew. Hence there is a need of an agricultural university for the State. Like Himachal Pradesh the state of Jammu and Kashmir is environmentally suited to horticulture. The fruits have been grown in this state since very long. To increase the yield, to control the pests and diseases of fruit trees and to domesticate many of the wildly grown fruits research work of a higher order is needed. For this purpose also an agricultural university is needed.

Forests are often called as 'green gold'. Apart from providing a salubrious climate and scenic beauty the forests check soil erosion, provide raw material to many forest based industries like furniture, timber, oils, gums, turpentine, resin, paper, cardboard, pulp, matchbox, synthetic yarn, sports goods, etc. etc. Hence the forests are the biggest industry and mainstay of the people in Kashmir. Scientific forestry does not mean the plantation of trees alone. It also means the preservation of existing forests, the cutting of mature trees, protection against forest fires and optimum use of forest products. In many parts of the state the illiterate and ignorant countrymen ruthlessly cut the trees in a most unscientific manner unmindful of the consequences. Moreover there are vast barren spaces in the forests which can be planted with trees. Therefore it is the need of the hour that forests are properly preserved and protected. On the other hand all possible forest industries should be started to make full use of these forests. In most of the backward areas where forests happen to be the most important natural resource all efforts be made to develop forests as a support to the rural economy. The literature on Kashmir cites many instances of the medicinal plants grown in Kashmir forests. The entire Ayurvedic system of medicine is based on natural herbs and medicinal plants grown in our forests. Therefore to make best use of the forests the growth and plantation of medicinal plants must be encouraged in Kashmir forests. Honey which is a nectar like food is a necessary corollory of forests. Kashmir is already known for its honey but keeping in view the large extent of state forests the production of honey is meagre. The production of honey must be raised for which no

huge investments are required. Similarly Kashmir is known for its saffron cultivation. Whereas we have the largest acreage under saffron cultivation, we are third in output. This implies that production of saffron can be raised without raising the acreage.

Kashmir state is not fit for starting heavy industries like iron and steel especially when the state lacks iron ore and coal. But once its agriculture, horticulture and forests are developed it can start many forest and agriculture based industries. Similarly the development of fishing would also help in the development of fish based industries. It may not be possible to industrialize the state at a rapid speed as Punjab and Haryana are doing but surely the industries can be developed to a comfortable degree. The fruit processing, sports goods, paper, newsprint, varnish-paints, rayon, silk, match box, woollen textiles etc. etc. can get raw material within the state. The products of all these industries are in heavy demand all over the country. Apart from these factory industries efforts can be made to develop handicrafts, small scale and cottage industries. Whereas the factory industries would create more and more jobs for the unemployed people the handicrafts etc. would wipe out the disguised unemployment from the countryside.

The state is rich in scenic beauty. Every valley has its own charm. So far only the areas in and around the Vale of Kashmir have been developed as tourist's attraction. Punjab and Haryana where the nature has been niggardly in providing the scenic charm have developed many places of tourist attraction. Once barren, dry and neglected, many parts of Haryana are today attracting thousands of visitors. The state of Jammu and Kashmir which is endowed with a multitude of natural attractions should spare no efforts to create more and more facilities and tourist attractions. Many European nations, the U.S.A., Canada and Japan are earning huge amounts of foreign exchange by way of their tourist industry. The state of Jammu and Kashmir should also develop tourism as a full-fledged industry and earn foreign exchange which can be invested to strengthen its economy. The Lolab valley, Gurez, Ladakh, Bhadarwah, Karnah, Bandipur, Ramball valley, Jigand and Pedri etc. possess many tourist attractions. But so far very little attention has been paid towards their tourist potential.

Above all we must forget that there is anything like Kashmir problem. Kashmir is an integral part of India and we must turn a deaf ear towards a person or party who talks about such a problem. We have already wasted about three decades in offering explanations at home and abroad. Psychologically the lingering of such an idea has certainly worked as a hurdle in the way of

State's economic development. Now forgetting once for all about all our past omissions and commissions we should wholeheartedly endeavour to develop a growth pattern best suited to the socio-economic conditions of the state so that sooner an egalitarian social order is attained in the state.

Last but not the least, there is one problem which has surprisingly escaped the attention of state as well as central leadership. In the wake of naked, unprovoked and sudden aggression by Pakistan (initially by tribals actively supported by Pakistani regular forces in men and material) many nationals of the state and especially Hindus crossed over to the neighbouring provinces of Punjab, Himachal Pradesh etc. etc. In the chaos and confusion then prevailing in the state these people had no option but to initiate some economic activity in the neighbouring state where they then felt more secured. Most of these displaced persons were farmers or petty traders. They left their hearths and homes, cattle, land, property and other belongings in the illegal and forceful occupation of Pakistan. These displaced persons living in states other than Jammu and Kashmir carried on many odd jobs in the vain hope of returning to their homes to lead again a settled and contented life. But their wishes were never rewarded. The Governments of India as well as Jammu and Kashmir never extended any financial and material help to these destitutely living displaced persons in spite of their representations, woes and cries. When their state brethren living in Jammu and Kashmir were provided with subsidiary provisions these unfortunate people had to buy the necessities of life not only on exorbitant prices but also in black market. No concessions were granted to their children in schools and colleges. After much hue and ycr the State Government extended ex gratia assistance to the tune of only Rs. 3500/- per family in the year 1960. But to the ill luck of many persons then serving in armed forces and other services this grant was refused on the ground that at the time of aggression no member of their family was in the affected area, but nobody saw to this reason that they also lost their hearths and homes.

What an irony that Government of India spent millions on the Bangla Desh and Tibetan refugees but nobody till this day cares for the lot of those displaced persons who were uprooted from Jammu and Kashmir and came to live in other provinces. We have paid huge sums by way of compensations to those who came as refugees from area now forming Pakistan and similarly to many oustees who were asked to leave their hearths and homes for providing places for the reservoirs of some of the river barrages and dams. But it is quite surprising that those displaced persons

who left their homes in Pak held Kashmir and migrated to other states have not so far been paid any compensation. These people did not cause any expenditure to the government by dwelling in refugee camps and still they were rewarded with no allotment of land, house plots and financial assistance. This fact continues to irk and irritate such families many of which are still living in uncomfortable conditions. When our government can spend vast sums on the Bangla Desh and Tibetan refugees (which were never our liabilities) and can also compensate for fire, flood and drought victims there is no reason that these persons should not be compensated. For a vast nation like ours this benevolent act would cause quite an insignificant expenditure to its exchequer.

The author at times thought of pursuing the case through persons who mattered in the Government. Dr. Karan Singh, former Union Minister who hails from this state and has been representing one of state's constituency in the Parliament was thought by the author to be a fit person. Author wrote about half a dozen of letters seeking appointment with Dr. Karan Singh but to his utter surprise his secretariat or personal staff never acknowledged any of the letters. It is just possible that while being a Central Minister he was too busy and had no time to listen to small frys like the author. Now when he has been relinquished of his ministerial appointment and he sits on the opposition benches, it is presumed that he would plead the case of those earlier state subjects who because of the sheer negligence of government are living as destitutes and poverty sticken citizens for no fault of theirs.

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